

# CWSF 2011 - Toronto, Ontario



## Grace Enns

### Raining Power!

**Challenge:** Environment

**Category:** Intermediate

**Region:** Windsor

**City:** Kingsville, ON

**School:** Cardinal Carter C.S.S.

**Abstract:** This project explored the effects tube length and diameter have on power output generated by water falling vertically onto a turbine. With tube length as the variable all 3m tubes yield a larger current than 2m tubes. When tube diameter was the variable the power output was directly proportional to diameter size. The duration of flow decreased when the diameter sizes and tube lengths increased.

### Biography

Hi, my name is Grace Enns and I'm in grade 10. I love all sports, but sailing happens to be my favourite. One of my greatest achievements was carrying the Olympic torch. It was really fun and made me very proud to be a Canadian. One of my greatest honors was being a valedictorian in grade 8. I find sciences very interesting and my goal is to become a healthcare professional or an environmental engineer.

### Awards

### Value

Excellence Award - Intermediate - Bronze Medal Sponsor: Youth Science Canada	\$300
The University of Western Ontario Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Western Ontario	\$1 000
<b>Total</b>	<b>\$1 300</b>