

# CARING FOR OUR Watersheds<sup>TM</sup>

Caring For Our Watersheds is a program that empowers students to imagine, develop, and create solutions in their local watersheds. The program promotes watershed awareness and stewardship, values student ideas, and offers support when turning theoretical ideas into action. Judges in the environmental field score student entries and ten projects are selected to compete in the final competition which was held on April 27th. \$10,000 in implementation funding (up to \$1,000 per project) is available to all participants, allowing each and every idea to be turned into a reality. At the final event, students presented their projects and finalists received cash awards and matching grants for their schools.

**Nutrien**<sup>TM</sup>



Caring For Our Watersheds is a joint program of the Hamilton County Soil & Water Conservation District and Nutrien Ltd.





# CARING FOR OUR WATERSHEDS FINALISTS

1st

First Place:  
**Wyoming High School**  
Olivia Dick  
Sophia Dick

2nd

Second Place:  
**Ursuline Academy**  
Allison Zwelling  
Megan Glass  
Isabella Richardson  
Trisha Leyda

3rd

Third Place:  
**Wyoming High School**  
AJ Washienko  
Jack Williams  
Evan Prater

**OUT OF OVER 80 ENTRIES** submitted this year, these ten teams advanced to the Final Competition where students competed for \$12,000 in awards for themselves and their schools.

**Project: WHEAT STRAW PLATES**

**Student:** Clare Hall

**School:** Mount Notre Dame High School

**Description:** In her school's cafeteria, Clare replaced conventional Styrofoam plates with biodegradable plates made from wheat straw. Styrofoam cannot be easily recycled and it is estimated that several centuries will be needed for it to break down. Clare hopes to have initiated a positive change that will be compounded as the school continues to purchase wheat straw plates.

**Project: STOP IDLING CAMPAIGN**

**Students:** Bella Saba, Kiernan Cinque, Chris Murtaugh

**School:** The Summit Country Day School

**Description:** With urban areas becoming increasingly more vigilant about air quality, one overlooked action which contributes to the problem of smog is vehicle idling. Students from SCDS have challenged their community to ditch pointless idling by posting "no-idle" signs on driveways that experience heavy traffic.

**Project: (RAIN) BARRELS OF FUN**

**Students:** Julia Breckenridge, Jenna Murdock, Sarah Slabe, Olivia Core

**School:** Ursuline Academy

**Description:** After becoming aware of storm-water runoff and its effect on local water quality, students from Ursuline Academy have sparked action by hosting a workshop that allowed families in their

community to learn to construct and install rain barrels. They hope to expand upon their project in the future by opening up the workshop to a greater number of participants.

**Project: RETHINK RECYCLING**

**Students:** Allison Zwelling, Megan Glass, Isabella Richardson, Trisha Leyda

**School:** Ursuline Academy

**Description:** In witnessing their peers soiling their school's recycling bins with food and liquid waste, these students have paved the way for more effective recycling practices. By displaying signs which depict recyclable items in their respective bins and hosting a week of education activities, they strived to create a systematic ripple effect on recycling in their school.

**Project: PREVENTING LITTER AND DOG WASTE IN THE MILL CREEK**

**Student:** Abby Shores

**School:** Wyoming High School

**Description:** Once she recognized the problems posed by litter in her local stream, Abby Shores of Wyoming High School made an impact by placing trash and pet waste bins around her community. Because her community's stream connects to the Mill Creek and therefore, the Ohio River, Abby hopes the bins will help address regional water pollution by encouraging her neighbors not to litter.

**Project: GROW, DON'T THROW**

**Students:** Stella Dionysiou, Jenny Lewis, Carla Unzueta

**School:** Wyoming High School

**Description:** Composting is the process in which leaves, yard trimmings, food waste and other organic materials are broken down to create

nutrient-rich soil. With over a third of the waste produced in the US being made up of organic matter, students from Wyoming High School have attempted to curb their school's footprint by constructing compost bins, allowing their peers to dispose of leftover food.

**Project: SAFE FISHING PRACTICES**

**Students:** AJ Washienko, Jack Williams, Evan Prater

**School:** Wyoming High School

**Description:** With modern fishing equipment designed to be as durable as possible, the Mill Creek's bird and fish species are being greatly affected by unused fishing lines, hooks, and lead-containing weights. With this in mind, these students have distributed environmentally-friendly fishing alternatives among people who frequent their local park. They hope to properly educate community members to be mindful of their local aquatic ecosystem.

**Project: BIODEGRADABLE ICE MELT ALTERNATIVE**

**Students:** Olivia Dick, Sophia Dick

**School:** Wyoming High School

**Description:** Every year, millions of tons of salt are used on roadways worldwide to melt snow and ice for vehicle use. As much of this road salt contains other hazardous chemicals, Olivia and Sophia Dick hope to mitigate environmental pollution by educating their community on an alternative to salt; they have created a recipe of alfalfa and coffee grounds which can be used to melt ice in the same way conventional road salt is used.

**Project: BUZZING WITH BIODIVERSITY**

**Students:** Lucas Plante, Sam Mota

**School:** Wyoming High School

**Description:** Over the past two decades, research has indicated a widespread decline in honey bee populations. To address this growing issue, students from Wyoming High School have educated their community and distributed pollinator-friendly seed packets to residents in their community.

**Project: THE RUNOFF SOLUTION**

**Student:** Brendon Lowry

**School:** Winton Woods High School

**Description:** Oil runoff resulting from faulty vehicle maintenance contributes to the pollution of land and waterways each year. With his talent for cinematic production, Brendon has created his own video project to educate members of his community to maintain their personal vehicles as a pre-emptive strategy to prevent harmful oil runoff.

**HONORABLE MENTIONS:**

**Music in the River**

Aria (Wyoming High School)

**Water Bottle Refill Station Campaign**

Sam, Sam (Wyoming High School)

**Special Recognition:**

**Caring For Our Watersheds One Bottle at a Time**

Isaiah, Gabriel (Archbishop McNicholas High School)

**The Mill Creek Watershed**

Carly, Malik, Mickeal, Louis (James N. Gamble Montessori High School)



# (RAIN) BARRELS OF FUN

Classified as one of the most endangered urban rivers in North America, the Mill Creek and its subsequent watershed has consistently needed support from the community. As part of the Caring For Our Watersheds program, students from Ursuline Academy decided to educate school families on rain barrels and how they can positively impact our community. Julia Breckenridge, Sarah Slabe, Olivia Core and Jenna Murdock worked with their mentor, Lauren Gottschalk (pictured with the students), to host a workshop addressing the lack of knowledge residents have about runoff and an easy potential solution - rain barrels.

In suburban areas, runoff is a large concern due to the overwhelming amount of impermeable surfaces (roads, building roofs and parking lots) and is visible to anyone after it rains as it can cause urban flooding and sewer back-ups. Julia, Sarah, Olivia and Jenna wanted to make people aware of the effect they are having on the quality

of water around them and how they could change their impact on the Mill Creek Watershed. They hosted a two-hour rain barrel workshop at their school and over 50 people attended! Local professionals, including Christopher Hall, Assistant Treatment Superintendent from Greater Cincinnati Metropolitan Sewer District (pictured with the students), spoke about runoff issues and solutions homeowners can take to help alleviate the problem, including installing a rain barrel. Ten families were able to actually take home a rain barrel and all the supplies necessary to assemble and connect it to their downspouts.

This project started out as a relatively small-scale project, focusing only on the ten families that signed up for the workshop. However, over 50 people ended up attending. By informing the student body and families of the environmental issue of runoff, more residents in the Mill Creek watershed will become aware and act to help improve this problem.



# STOP IDLING CAMPAIGN

With urban areas becoming increasingly more concerned about air quality, one action that greatly contributes to the problem of air pollution is vehicle idling. Cars and trucks are the main source of air pollution in the Greater Cincinnati area. Idling cars can release harmful emissions into the air that can contain particulate matter, volatile organic compounds, carbon monoxide and many other harmful elements. When mixed with heat and sunlight they can create smog. Studies show that particulate matter in exhaust can travel deep into the lungs and the blood stream – aggravate asthma, cause difficulty breathing, decrease lung function, exacerbate cardiovascular problems and lead to chronic bronchitis. Particulates released from exhaust are also a cause of cancer, heart disease and visual impairment. Children are especially sensitive to air pollution because they breathe faster, taking in more air than adults.

Students from The Summit Country Day School had noticed that cars line up in the carpool lines,

sometimes as much as an hour before the school day ends, endlessly idling while waiting to pick up students. Bella Saba, Kiernan Cinque and Chris Murtaugh wanted to stop the idling on their campus in hopes of cleaning up the air quality around school and helping everyone breathe a little easier.

Working with their administration, their teacher and local mentors, Bella, Kiernan and Chris installed six signs throughout campus to discourage drivers from idling from 2-3:15 p.m. on school days in hopes of reducing air pollution. They also included an article in the weekly email memo sent to parents alerting them of the new signs and educating them about the dangerous effects of idling cars. By completing their project, Bella, Kiernan and Chris hope all members of the Summit Country Day School community and surrounding areas cooperate with this initiative and turn off their engine while waiting, helping people to save money and breathe better.



# THE RUNOFF SOLUTION

As part of the Caring For Our Watersheds contest, students were asked the question, "What can I do to help my watershed?" Winton Woods High School student, Brendon Lowry had a different answer than most. This talented filmmaker decided to create an ad/PSA on oil runoff from motor vehicles. Brendon felt this was an important issue that needed more awareness. Automotive fluids, such as antifreeze, transmission fluid and engine oil, from our cars and motorcycles can leak onto parking lots, driveways and streets and wash into the storm drains, which lead to local creeks and streams.

The film Brendon created was divided into two sections: The first section is a video about oil runoff, how it happens and where the oil ends up; the second section of the film is a series of interviews. Brendon conducted interviews with several people in the community discussing the importance of oil runoff education to determine how

many individuals considered this to be a topic that needs attention in our community.

Brendon thought it was very important for consumers to understand the issues with oil runoff. Motor oil spills and leaks are one of the largest single sources of oil pollution in our watershed. Oil is toxic to people, wildlife and plants. One quart of motor oil can pollute 250,000 gallons of water and Americans spill over a million gallons of used motor oil into our nation's waterways each year.

Brendon, a Junior at Winton Woods High School, used his talents and passion for filmmaking to help his watershed. It was an innovative, educational take on the Caring For Our Watersheds competition and he hopes to spread the word to help clean up our local creeks and streams. To see Brendon's work and the interviews on YouTube, find him at Official Brendon Lowry.







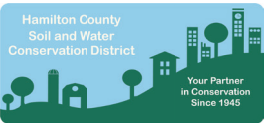
# PARTNERS IN EDUCATION

## Organizations dedicated to creating the next generation of land stewards in Hamilton County

Nutrien and The Hamilton County Soil and Water Conservation District understand the importance of protecting our watersheds and conserving natural resources. But it's equally important to cultivate future land stewards and tomorrow's advocates for the environment. That's why the Hamilton County Soil and Water Conservation District has partnered with Nutrien to establish Caring For Our Watersheds, a unique program that enhances classroom learning through the practice of environmental research, writing skills, public speaking and hands-on stewardship. The program, which is funded by Nutrien and run by Hamilton County Soil and Water Conservation District, asks high school students to propose ideas on how to improve local watersheds. Students with strong proposals will then have the opportunity to put those ideas into action. As projects are planned and implemented, students develop strong leadership skills, learn sustainable practices, and contribute to creating a healthier ecosystem. Students also have opportunities to connect with environmental professionals who volunteer and mentor the students as they learn new skills and develop deeper connections with the community in which they live. Caring For Our Watersheds is open to all high school students who live in or go to school in Hamilton County.



Caring For Our Watersheds is sponsored by Nutrien, a worldwide producer and retailer of fertilizers and other agricultural products and services. As the world's largest provider of crop inputs and services, Nutrien plays a critical role in Feeding the Future by helping growers increase food production in a sustainable manner. With nearly 20,000 employees, operations, and investments in 14 countries, Nutrien's crop inputs and services reach every major growing region of the world.



**The Hamilton County Soil & Water Conservation District (HCSWCD)** is responsible for the conservation of natural resources within Hamilton County, Ohio. They have a special emphasis on soil and water with a focus on assisting landowners in planning and applying conservation practices on the land. HCSWCD is dedicated to the sustainable use of our natural resources and to encouraging positive behavioral changes that produce a higher quality of life for our citizens. The District assists all Hamilton County residents, schools, and jurisdictions through their services and dynamic partnerships that continually provide innovative solutions for the challenges of our region.

# CARING FOR OUR WATERSHEDS PARTNERS

### PARTICIPATING TEACHERS AND SCHOOLS

- Deborah Brookbank** - Winton Woods High School
- Mary Dennemann** - Archbishop McNicholas High School
- Mary Dudley** - James N. Gamble Montessori High School
- Tracy Majors** - Wyoming High School
- Monika Nuñez** - Ursuline Academy
- Kira Schall** - Winton Woods High School
- Michelle Shafer** - Mount Notre Dame High School
- Kathryn Sickinger** - Summit Country Day School

### JUDGES AND VOLUNTEERS

- Pat Bruns** - (former) OH State Board of Education
- Liz Congleton** - City of Cincinnati Office of Environment & Sustainability
- Rachel Cranmer** - Cincinnati Zoo & Botanical Garden
- Lori Dorn** - Greenacres Foundation
- Sara Fehring** - HC Soil & Water Conservation District
- Sandra Frank** - Volunteer
- Lauren Gottschalk** - Keep Cincinnati Beautiful
- Todd Long** - Hamilton County Engineer's Office
- Maribeth Hassett** - Greenacres Foundation
- Scott Huber** - HC Soil & Water Conservation District
- Brad Johnson** - Hamilton County Environmental Services
- Sharon Johnson** - Volunteer
- Kylie Johnson** - Civic Garden Center of Greater Cincinnati
- Sarah Kitsinis** - TRC Solutions
- Adam Lehmann** - HC Soil & Water Conservation District
- Christen Lubbers** - Architectural Foundation of Cincinnati
- Kara Luggen** - Keep Cincinnati Beautiful
- Brittany Lynn** - Gorman Heritage Farm
- Sue Magness** - City of Cincinnati Office of Environment & Sustainability
- Marissa Maltry** - Volunteer
- Lauren McClure** - Cincinnati Zoo & Botanical Garden
- Colleen O'Connor** - Architectural Foundation of Cincinnati
- Jennifer Phillips** - Celanese
- Janet Schoenbachler** - Volunteer
- Dorothy Smith** - Robert Bosch Automotive Steering
- Eric Tanner** - Melink Corporation
- Fia Turczynewycz** - Cincinnati Zoo & Botanical Garden
- Holly Utrata-Halcomb** - HC Soil & Water Conservation District
- Glen Vonderembse** - OEPA, Division of Surface Water
- Bryn Weller** - Photographer
- Barb Wriston-Ruddy** - Volunteer
- Claudia Zaher** - Volunteer