St. Andrew?s College, SolversMind recognized as ?Environmental Heroes? by LSRCA

St. Andrew's College and Aurora's SolversMind Robotics were among the honourees last week when the Lake Simcoe Conservation Authority came together to host its 43rd annual awards ceremony recognizing ?Environmental Heroes.?

Held at the NewRoads Performing Arts Centre in Newmarket, 23 individuals, businesses, groups, and organizations were celebrated for ?working hard to improve our environment.?

?In a time when environmental challenges can feel overwhelming, these local heroes remind us that positive change starts right here in our own communities,? said Barrie Councillor Clare Riepma, who chairs the Lake Simcoe Region Conservation Authority. (LSRCA) ?Their efforts inspire hope and reminds us that environmental stewardship is truly a shared effort.?

Added LSRCA CAO Rob Baldwin: ?The future is truly bright. This year's recipients include seasoned conservation champions and an impressive number of young environmental leaders. Together, they're showing that the passion for protecting our environment is alive and well, and that's something worth celebrating.?

Aurora's St. Andrew's College (SAC) was among 10 recipients of the Healthy Community Award, alongside: Fred C. Cook Public School Eco Phoenix (Bradford West Gwillimbury); Magna Mechatronics, Mirrors & Lighting (Newmarket); Morning Glory Public School (Georgina); Rotary Club of Barrie Huronia; Rotary Club of Uxbridge; South Simcoe Streams Network (Innisfil); Stouffville Library; WS Butterflyway Project (Stouffville), and Youth for Lake Simcoe (Barrie).

?Since 2021, Outdoor Experiential Education Coordinator Angus Murray has led tree planting events at St. Andrew's College,? reads SAC's citation. ?With the help of the Conservation Authority, he has engaged students in hands-on learning and promoted environmental sustainability across the school's 126-acre campus.

?As part of their 125th Anniversary Challenge, 1,250 trees were planted, including 400 in the fall of 2024, with alumni, students, and staff, and an additional 150 were planted and mulched by Environmental Studies students. In the Spring of 2025, 40 more native trees and shrubs were planted beneath the Willow Farm Boardwalk, helping to restore local habitats, enhance biodiversity, and stand as a living legacy of stewardship for the school and the wider community.?

Two projects under the SolversMind Robotics umbrella secured it the Distinguished Achievement Award.

According to the LSRCA, 20 students between the ages of 11 to 14 regularly gather at SolversMind to ?tackle environmental challenges? through the principles of STEM ? Science, Technology, Engineering and Math.

?The first project, the River Trash Capture System, also known as the Spinning Geary, was designed to collect floating pollution directly from narrow streams and small rivers that feed into larger bodies of water like Lake Simcoe,? said the LSRCA in SolversMind's citation. ?The students observed that visible plastic waste often accumulates in smaller waterways, carried by wind and runoff, especially in urban and residential areas. To address this, they created a modular, floating collection device with rotating paddle elements powered by natural water flow. This passive rotation directs debris into a mesh catchment area without the need for electricity or external control. The team successfully demonstrated the concept using a working prototype in controlled lab conditions, where it successfully redirected and collected simulated floating waste. The design was also presented to several industry professionals, including a watershed expert from the Lake Simcoe Region Conservation Authority, who praised its potential. The Spinning Geary's lightweight and modular design makes it well-suited for use in public waterways upstream of Lake Simcoe, where litter can be collected and removed before reaching the lake.

?The second project, Seaweed-Based Biodegradable Plastics, tackles the broader issue of plastic pollution by exploring a sustainable alternative made from fast-growing, low-maintenance marine biomass. The students chose seaweed as their primary material

because it grows quickly, requires no farmland, fresh water, or fertilizers, and absorbs carbon dioxide, making it an ideal renewable resource. Recognizing the growing global market for seaweed-based materials, the team aimed to create a substitute for petroleum-based plastics in packaging and disposable products. In lab testing, their prototype decomposed significantly faster than conventional plastics under soil and water conditions. They framed this innovation within a circular economy model, designing a product made from renewable resources that naturally returns to the environment without leaving lasting waste. While broadly applicable, they emphasized its local impact by connecting upstream plastic reduction to improved water quality in Lake Simcoe, and in doing so, they showcased how green innovation can support both ecological and economic sustainability.?

Additional honourees included:

Healthy Water Award:

City of Barrie, Town of Bradford West Gwillimbury, Town of Georgina, Wildridge Farm (Town of Innisfil), Township of Uxbridge.

Healthy Land Awards:

Doug Pegg (Township of King), Town of East Gwillimbury, Peter and Betty Homenuck (Township of King), Mike Sproxton and Sarah Teefy (City of Kawartha Lakes), John Nagy (Township of Brock).

Ernie Crossland Young Conservationist Award:

Anne Bowman (Lake Simcoe Watershed)

George R. Richardson Conservation Award of Honour:

Bruce Brydon (Lake Simcoe Watershed)

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