Community-led Action to Address Stormwater Pollutants Project
2025 Summary Report

In 2025, the Junction Creek Stewardship Committee (JCSC) delivered an integrated stormwater stewardship program expanding upon a pilot project that began in 2022. The project combined innovative pollution prevention, data-driven monitoring, on-the-ground community cleanups, education, and public awareness initiatives to reduce stormwater pollution entering Junction Creek and connected Great Lakes waters while fostering community engagement and environmental stewardship.

With the collaborative support of community partners, stakeholders, and funders, the project enhanced local stormwater stewardship and awareness activities, successfully reducing stormwater pollutants in local waterways while engaging residents, students, and partners across Greater Sudbury in freshwater protection.

KEY ACTIVITIES

Stormwater Filters and Litter Tallies

JCSC conducted routine monitoring and management of 30 previously installed EnviroPod™ LittaTraps at 12 properties and installed 7 additional traps across two properties, including one new partner site. Sediment liners were added to 5 traps to improve capture of sand and fine particulates. Traps were inspected regularly and manually emptied as needed. Collected material was dried and analyzed through 18 litter tally activities, including 10 community-based tallies with schools and volunteer groups and 8 tallies led by placement students between May and August.




Community Cleanups

JCSC partnered with 15 organizations to deliver 13 community cleanups and completed an additional 8 in-stream cleanups by staff and placement students between April and November through the City of Greater Sudbury's Adopt-a-Spot program. Cleanups targeted litter hot-spots along Junction Creek, its tributaries, and their shorelines across Greater Sudbury, including repeated efforts at priority sites.



Educational Programs and Outreach

JCSC delivered 48 bilingual school programs, 6 student workshops, 8 presentations, and 13 interactive public outreach displays, engaging learners of all ages. Programming emphasized stormwater pathways, pollution prevention, freshwater ecosystems, and water stewardship.


Yellow Fish Road Program

Through two collaborative Yellow Fish Road events, JCSC worked with Science North's ASK group and a local Girl Guides group to paint bright yellow fish and "Rain Only" messages on storm drains. These highly visible markers reinforced the connection between storm drains and local waterways while distributing educational flyers to the public.




RESULTS AND OUTCOMES

The project exceeded its targets and amplified its impact thanks to additional funding and strong community support. Below is a breakdown of the results and outcomes achieved, also see *Appendix 1 : Stormwater Project Impact Summary*.

Partnerships

JCSC collaborated with **13 partner properties**, **15 cleanup partners**, and **4 volunteer groups**, including schools, post-secondary institutions, businesses, municipal partners, libraries, stewardship groups, and community organizations.

Pollution Prevention and Data Collection

- **314 kg of litter and debris captured** by storm drain filters.
- **8,668 pieces of litter** prevented from entering local waterways. The top type of litter captured in the storm drain filter were **cigarette waste**, accounting for 52% (4,528 were cigarette butts). The other top types of litter were hard and soft **plastic**, accounting for 22%. See *Appendix 2: Storm Drain Filter Results*.
- **2,613 kg of garbage removed** through cleanups, making up **401 bags of garbage** plus large debris**.** See *Appendix 3: Cleanup Summary 2025*.
- **22 hectares** of shoreline and stream cleaned (excluding repeated cleanups at the same sites).

Community Engagement

- **142 volunteers** participated in litter tallies and data entry.
- **226 volunteers** supported cleanup efforts.
- **2,676 participants reached** through education and outreach, including **1,452 students across 24 schools.**
- Yellow Fish Road activities engaged **39 participants**, marked **30 storm drains**, and distributed **126 flyers.**
- **Informative Bilingual handouts and resources** were widely distributed across media outlets and public events, including creek-friendly practices and pocket ashtrays.
- **3,128 total participants** in project activities.

The project achieved several notable successes that expanded its reach, effectiveness, and impact across the Junction Creek watershed. The program grew through the installation of additional storm drain filters, the use of new sediment liners, and the inclusion of a new partner property, resulting in a 15% increase in the annual amount of litter and debris removed through JCSC stormwater programs. To support this growth, Litter Tally resources were enhanced with bilingual, colour-coded reference sheets and additional Litter Tally kits, enabling participation by larger and more diverse groups.

The project also sparked increased interest from partner properties in proactively reducing stormwater pollutants, particularly cigarette waste. Several partners expressed interest in exploring or implemented measures such as smoke-free zones, cigarette receptacles, and strengthened policy enforcement. Educational programming was further strengthened through the introduction of new French-language programs and French feedback surveys, broadening accessibility and inclusion. Educational outcomes were strong, with 96% of participating students reporting they learned something new and 81% indicating increased concern for water stewardship.

Overall, the project received highly positive feedback from educators, students, and partners, who highlighted the engaging, hands-on, and visually effective nature of the programming. High visibility and public engagement were also achieved through social media, which showcased project events, stormwater awareness messages, and impact summaries, helping to extend the project's reach beyond direct participants and reinforce key stewardship messages within the broader community.

IMPACTS

The project generated lasting environmental and social impact in Greater Sudbury. The reduction of pollution entering Junction Creek and its connected waterways helped to improve water quality and restore freshwater habitat.

The project also generated scientific data to build upon litter databases, such as the International Trash Trap Network, and share knowledge with local stakeholders, rights holders, and the broader community. This data is supporting evidence-based stormwater management and informing more effective litter prevention and reduction strategies both locally and globally.

In addition, the project strengthened community capacity for hands-on environmental action by engaging volunteers, youth, and residents in monitoring, cleanups, and education. These experiences built practical skills, environmental awareness, and a sense of shared responsibility for protecting local waterways.

Overall, the project fostered long-term stewardship, with many participants committing to continue learning, sharing knowledge, and taking action to reduce stormwater pollution and support the health of Junction Creek and downstream ecosystems.

OVERCOMING CHALLENGES

The project faced several operational and environmental challenges that required adaptive solutions. Sediment-heavy debris collected from storm drains with sediment liners often remained too damp to sieve efficiently; this was addressed by extending drying times prior to conducting litter tallies, ensuring accurate and consistent data collection. In a small number of locations, LittaTraps and sediment liners were damaged, likely due to lit cigarette butts being discarded into storm drains, which compromised the effectiveness of the filters. This challenge was mitigated by keeping replacement filters and liners on hand, increasing monitoring frequency at affected sites, and working directly with Enviropod to report incidents, receive replacements, and support ongoing improvements to product design.

Weather also posed challenges during community cleanup events. To minimize disruption and ensure volunteer safety, backup rain dates were built into event planning, weather forecasts were closely monitored, and clear communication was maintained with volunteer groups to allow for timely rescheduling when needed. In addition, in-stream cleanups presented safety risks that made them unsuitable for general public participation due to steep banks, working in flowing water, and the presence of hazardous materials. These tasks required more time and specialized training and were therefore carried out by JCSC staff and placement students using kayaks to safely access and remove garbage from within the stream.

FUTURE RECOMMENDATIONS

- Manage and reduce the accumulation of road sand in areas with sensitive natural features to protect habitat quality and prevent sediment-related impacts on waterways. Expand and improve targeted collection and monitoring of stormwater sediment by installing additional sediment liners in catch basin filters, increasing the frequency of material removals, and allowing longer drying times to ensure more accurate and efficient data collection.
- Develop targeted educational programs and resources aimed at reducing the most common litter sources, particularly cigarette butts and plastic waste, including the provision of specialized receptacles and recycling programs for cigarette disposal.

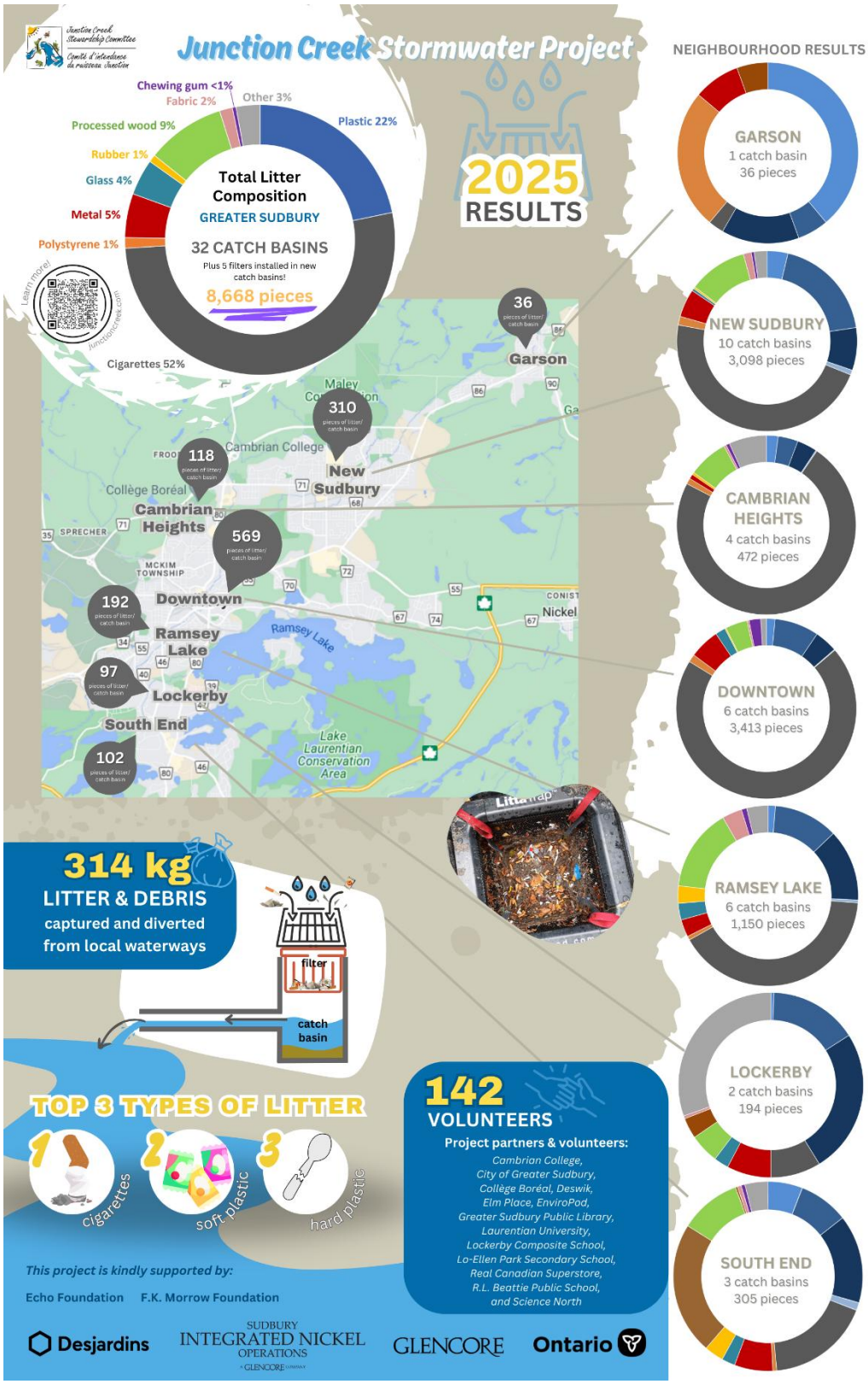
- Continue promoting strategic installation of ashtrays at partner properties where feasible, while reinforcing messaging for smokers to properly dispose of cigarette waste and not to flick their cigarettes on the ground or in storm drains.
- Further expand French-language programming with enhanced follow-up activities and comprehensive classroom resources to increase accessibility and engagement among francophone students.
- Continue to collaborate with stakeholders and rights holders to address the root causes of stormwater pollutants, strengthen stormwater management practices, and implement proactive strategies to prevent pollutants from entering waterways.

CONCLUSIONS

The *Community-led Action to Address Stormwater Pollutants* project demonstrates the impact of combining innovative solutions, community engagement, and education to protect local waterways. Through storm drain filters, hands-on stewardship activities, and outreach programs, JCSC successfully reduced litter and pollutants entering Junction Creek while fostering environmental stewardship across Greater Sudbury. With the support of funders, community partners, and volunteers, the project not only achieved measurable environmental outcomes but also strengthened community capacity for long-term water protection. Moving forward, these efforts provide a strong foundation for continued collaboration, informed decision-making, and sustained stewardship of our freshwater ecosystems.

Appendix 1. Stormwater Project Impact Summary

Appendix 2. Storm Drain Filter Summary



Appendix 3. Cleanup Summary 2025

2025 Junction Creek Clean-Up Activities AT-A-GLANCE

LARGE ITEMS FOUND IN JUNCTION CREEK

Shopping carts

Tires

Televisions

Air Conditioners

21 CLEAN UP ACTIVITIES

226 VOLUNTEERS

429 BAGS OF GARBAGE

2,613 KG OF TRASH

CLEAN-UP VOLUNTEERS

BESTECH

Cambrian College placement students

Cambrian College Solid Waste Class

Coca-Cola Canada Bottling Ltd.

L'école secondaire catholique l'Horizon placement student

Lockerby Composite School placement students

MNR Stewardship Youth Rangers

New Sudbury Centre

Northern Ontario School of Medicine

Orkin Canada Pest Control

Pioneer Construction/ Fisher Wavy

Rainbow Routes Association

RBC Sudbury

St. Charles Catholic School

and various community members

Supports and funders:

BESTECH, Coca Cola Bottling Sudbury, Desjardins, Echo Foundation, F.K. Morrow Foundation, Glencore Sudbury Integrated Nickel Operations, Trans Canada Trail, City of Greater Sudbury, Government of Ontario, and Government of Canada

Thank you, Merci, Miigwetch!