

## **SCHOOL RECYCLING PROGRAM EXECUTIVE SUMMARY**

### **Overview:**

This report provides a summary of the activities and outcomes of the Washtenaw County School Recycling Program during the 2018-2019 school year.

During the 2018-2019 school year, 26 Washtenaw public schools participated in the Washtenaw County School Program. Five new schools joined the program in January 2019, one in Whitmore Lake School District and four in Saline School District.

### **Washtenaw County School Recycling Program**

Schools Participating in the program from Aug 2018- June 2019

#### Lincoln School District

Bishop Elementary  
Brick Elementary  
Lincoln Middle School

#### Milan School District

Paddock Elementary  
Symons Elementary

#### Saline School District

Heritage Elementary  
Saline Middle School

#### Whitmore Lake School District

Whitmore Lake Elementary  
Whitmore Lake High

#### Ypsilanti School District

Ypsilanti Community Middle  
WIMA / WIHI  
Ypsilanti Community High  
ACCE Academy

#### Dexter School District

Jenkins Early Childhood Center  
Anchor & Beacon Elementary  
Bates Elementary  
Wylie Elementary  
Creekside Middle  
Mill Creek Middle  
Dexter Alternative / Admin Bidg  
Dexter High

### **5 New Schools joined in January 2019**

*Harvest Elementary  
Woodland Meadows Elementary  
Pleasant Ridge Elementary  
Saline High School  
Go Like the Wind Montessori*

Kick off meetings are held with school administrators, teacher leads, and facilities coordinators. Washtenaw County, the Ecology Center, and Recycle Ann Arbor meet with the school to explain the program, provide materials, schedule logistics, identify educational opportunities, and find ways to increase diversion through the year.

Schools collect recycling with 8 cubic yard recycling dumpsters for “bulky OCC cardboard” alongside 5-12 single-stream 96-gallon recycle carts for the paper, plastic bottles and tubs, aluminum and metal cans and other recyclable materials. Although the indoor bin collection systems varied by school, all schools implemented efforts to collect recyclables from classrooms and offices. Eight of the schools worked to divert recyclable materials from lunch rooms as well.

All schools were offered County-funded educational support throughout the year to ensure that each school community was well informed about the recycling program and its needs. Education was provided in the form of Ecology Center-led teacher and administrator staff trainings, custodial & kitchen staff trainings, student assemblies, classroom programs, green-team trainings, after-school family education events, recycling checklists, recycling guideline posters, lesson plans, and slide-presentations, and pilot of new Elementary Classroom Recycling Kit. Recycle Ann Arbor and Ecology Center staff continuously welcomed school leaders to reach out with informal communication as needed, to quickly address their specific questions and concerns.

Recycle Ann Arbor’s Recycle Program Coordinator conducted end of the year Post Surveys Meetings for all 26 program schools. A list of scripted questions were formulated through the County program partnership. The Post Survey gives school employees a chance to provide feedback which can improve the program and allows for program evaluation. At each Post Survey Meeting, County staff shared school specific recycling diversion rates and how these tonnages compared to the rest of the program, basing levels on a per capita figure. The County reported the total of unnecessary service visits. An unnecessary service visit occurs when schools don’t put out recycling for pick up or the carts are empty.

### **Collection:**

Recycle Ann Arbor (RAA) provided weekly single stream recycling cart service to all participating Washtenaw County School Recycling Program Schools. Any school’s contamination issues were initially directed to the Ecology Center’s educational coordinator, who could follow-up with the schools to help improve the situation onsite. The education coordinator provided program and curriculum information specific to the given contamination situation, to help improve the knowledge and troubleshooting skills of the onsite staff and student teams.

If such communication did not improve the situation at the given school, Recycle Ann Arbor Program Coordinator would email the Washtenaw County Solid Waste

Specialist, the school’s administrative staff, and the Ecology Center’s Educational Coordinator, to update all parties that no change was being seen onsite by the service provider. By having all parties involved in such communication, contamination issues at a specific school were given immediate attention and dealt with proactively. Recycle Ann Arbor continued to provide weekly volume and contamination assessment of the trash and recycling dumpsters, as well as the actual weight of the recyclable cart materials serviced for all schools participating in the program, to Washtenaw County for reporting purposes.

**Education:**

Ecology Center educators offered all schools training for administrative, teaching, custodial, and kitchen staff as well as ongoing support for student education throughout the school year. Two elementary schools, Whitmore Lake and Symons, were invited to pilot a new Classroom Recycling Kit containing 20+ recycling education activities and all required materials. 19% of participating schools received substantive recycling education from the Ecology Center this year. Another 32% received partial educational support through a staff training, classroom workshops for some (but not all) students, or a special event. Table 1 lists Ecology Center-led programs and resources for 2018-2019 year. The Ecology Center categorized each school as substantial (green), minimal (yellow), no recycling education (red), or programs that joined in January and didn’t schedule educational programs by the end of the year (white).

**TABLE 1: Education programming during 2018-2018**

School	Joined Program	2018-2019 Staff Trainings	2018-2019 Student Programs/ Education Support
ACCE (formally Forest)	October 2017		
Anchor (formally Cornerstone) Elementary	September 2016		
Bishop Elementary	September 2018	9/5/18	Student assembly 9/7/2018 PTO Meeting event 9/12/2018 Bishop Award Ceremony 11/15/2018
Beacon (formally Bates) Elementary	April 2018		
Brick Elementary	September 2016	10/3/2018	4 student workshops 12/10/18 & 12/11/18 1 student workshop 12/13/18

Creekside Elementary	April 2018		
Dexter Alternative	April 2018		
Dexter High	April 2018		
Go Like the Wind Montessori	January 2019	11/2/2018	3 student workshops 01/16/2019
Harvest Elementary	January 2019		New school welcome letter with invitation to schedule education
Heritage Elementary	January 2016 (pilot school)	9/12/2018	Award Ceremony 09/27/2018
Jenkins Early Childhood	April 2018		
Lincoln Middle School	January 2016 (pilot school)		After School Group Training 10/08/2018
Mill Creek Middle	January 2016 (pilot school);		
Paddock Elementary	January 2016 (pilot school)		3 student workshops 10/22/2018 3 student workshops 4/11/2019 3 student workshops 4/12/2019
Pleasant Ridge Elementary	January 2019		New school welcome letter with invitation to schedule education
Saline High	January 2019	05/01/2019	3 student workshops 05/15/2019
Saline Middle	September 2016		Recycling Fair 11/02/2018
Symons Elementary	September 2016		Classroom Recycling Kit delivered
WIHI / WIMA	January 2016 (pilot school)		
Whitmore Lake Elementary	January 2016 (pilot school)	09/11/2018	2 student workshops 09/11/2018 Student assembly 03/06/2019 Classroom Kit Staff training and delivery 02/16/2019 Recycling Night event 05/15/2019
Whitmore Lake Secondary	September 2016	09/11/2018	
Woodland Elementary	January 2019		New school welcome letter with invitation to schedule education

Wylie Elementary	April 2018		STEM Night event 02/01/2019
Ypsilanti Middle	January 2016 (pilot school)	10/02/2018	2 student workshops 12/03/2018, 7 student workshops 12/04/2018, 5 student workshops 12/19/2018, Green Team Training 09/25/2018
Ypsilanti Community High	April 2018	10/16/2018	Open House event 09/19/2018

Schools that take advantage of educational programming are correlated with higher scores on the adult feedback survey. Staff are asked Likert-Scale questions related to the quality of the service, the quality of recycling education, access to resources, attitudes about recycling, and recycling behaviors.

**TABLE 2: Adult Feedback Survey Results by Educational Category**

<b>Staff Feedback about Recycling Average score with min=1, max=5</b>	<b>Schools with Substantial Education</b>	<b>Schools with Minimal Education</b>	<b>Schools with No Recycling Education</b>
Overall quality of recycling service	4.74	4.39	4.59
Overall quality of recycling education	4.56	4.00	3.00
Perceived access to help/resources	4.44	4.26	2.73
Positive attitude	4.91	4.41	4.51
Behavior change	4.30	4.33	3.10

### *Staff Training*

The Ecology Center provides school staff trainings that range from 15-40 minutes depending on the amount of time that school administrators were willing to designate. Schools that received training had full teaching staff and administrators in attendance for presentation during the school's regular staff meeting time. The custodial staff from each school received Recycle Ann Arbor Recycle Program's staff contact information to plan service details, review recycling rules, and request extra pickup services.

During staff trainings, teachers most commonly asked about whether specific items were recyclable and suggestions for helping their students recycle properly. When

time allowed, training included an activity asking staff to work with a partner to identify what they believed to be recyclable and non-recyclable items from a checklist. After teachers completed the checklist, the facilitator verbally provided the correct answers, which prompted questions from teachers and an opportunity for the facilitator to explain how recycling rules are tied to market factors as well as technical features of hauling and MRF operation.

Following staff trainings, or when schools reached out with specific questions, Ecology Center educators shared printed copies or recycling posters, copy of presentation slides, or other relevant e-resources.

### *Student Education*

All of the participating schools were offered free student-focused recycling education. School administrators or teacher-leaders coordinated with Ecology Center educators to schedule in-class education, green team workshops, or after-school education events. Schools either elected to have all students participate in workshops or identified a subset of students to be trained to take responsibility for student leadership on recycling (green team, leadership class, grade-level). Student in-classroom workshops lasted 55 minutes and involved a brief introduction followed by a series of small-group activities. (1) The student programs all introduced students to features of the recycling system, and (2) explored recycling rules through hands-on sorting practice with real items, pictures, and words. Students at all grade levels were also (3) introduced to the concept of a product life cycle using age appropriate examples and physical manipulatives to sequence the steps in the process. Students compared the linear system of a product that ends up in the trash with the circular model of a recycling system. Recycling benefits both in terms of pollution prevention and resource conservation were identified by students during this activity. Green Team Programs included an introduction to methods for monitoring waste and walking through an Action Planning template for taking action to support indoor collection system for recycling and/or further educate the school community about recycling. Learning goals were to raise student awareness about recycling within school building, train students to understand what materials can be recycled, motivate students to value recycling, and empower students to be actively involved in making school recycling a success.

### *Other Education*

The Ecology Center education team offered a number of interactive stations for school-based events, such as open houses or STEM family nights. These activity stations are designed to give families an introduction to the school's recycling system and explore related waste issues through demonstrations, games, or crafts. Four of the participating schools invited the Ecology Center to bring activity stations to school events, including Saline Middle, Whitmore Lake Elementary, Wylie Elementary, and Ypsilanti Community High.

The Ecology Center was invited to provide a presentation to Bishop Elementary's Parent Teacher Organization early in the school year. The format of this presentation was similar to a staff meeting.

## **Recycling Contest**

In the 2018-19, Advanced Disposal renewed their commitment to offer a Recycling Contest. The contest was developed to provide an opportunity for students to promote recycling throughout the community. Students at all participating schools in the Washtenaw County School program as of September 2018 were given the chance to create a 2-D piece of art and a slogan around promoting and educating the community about recycling. Participating students at elementary schools won a touch-a-truck event for their school. All winning student artwork was displayed on an electronic billboard on I-94. The winner for the secondary schools' contest won a pizza party for their entire grade level. The contest details were offered at each kick-off meeting for the school. A formal letter was given at the kick-off meeting inviting schools to participate in the contest. School staff and administrators expressed excitement at the continuation of the recycling contest. All schools were given the same deadline of America Recycles Day, November 15th, 2018 and were instructed to request pick-up or send entries to Ecology Center educators.

Over a dozen entries were received. The recycle program team members collectively reviewed and judged all student entries submitted from schools. Due to a tie between the secondary school entries, three winners were chosen from Ypsilanti Middle School. Advanced Disposal took initiative in displaying the elementary school winner and the three winners for the secondary school on the I-94 billboard. The winning school for the Elementary contest was Bishop Elementary. Ypsilanti Middle School won the secondary contest and hosted an awards ceremony for winning students. Representatives from the Ecology Center, Washtenaw County, and Advanced Disposal attend the ceremony to hand out certificates to the winners.

## **Challenges:**

One operational challenge rose to the forefront. Some of the schools did not put carts out every week, or did not use all of their onsite recycle carts, resulting in unnecessary service trips and charges. When schools don't require services, they are to notify recycling program staff, cancelling the service for the week.

Educational challenges also emerged. Ecology Center Staff identified possible barriers to educational programming including that in previous years schools may feel they "have already had" education or think that recycling posters are sufficient education. This likely contributed to the lack of request for educational support. However, a new barrier to communication also emerged. Direct communication

between Ecology Center and school representatives who would have scheduled education was hampered within district or school on a number of occasions. This appeared to arise from a well-intentioned effort to relieve teaching staff from need to schedule with the Ecology Center or a desire to have students take the lead. District leaders or administrators took on a coordinating role that ultimately led to lack of communication and engagement within district or school about available educational resources.

### **Addressing Challenges:**

To address unnecessary service visits, Washtenaw County will exercise the MOU, and will charge schools for unnecessary trips without prior communication (a warning or “freebee” is given). The goal is not to recoup losses but to create a sense of accountability and reduce unnecessary trips in the future.

Multiple efforts will be made to increase the level of education provided by the program. Washtenaw County Staff will emphasize the importance of educational services provided by the Ecology Center during the 2019-2020 Kick-off meetings. Furthermore, the Ecology Center proposes to take action in three areas in the 2019-2020 school year to ensure schools receive the education they require to improve recycling habits. These steps include (1) creating a written description of available educational services and an online registration form to make it easier for school personnel to share information about opportunities, (2) offering program features that schools will recognize as new educational opportunities for their staff and students, including waste audit activity for middle/high schools, ReEco Raccoon mascot and Classroom Kit for elementary schools, and Master Recycling Educator training for adults, and (3) a new approach to collecting data on education impact and recycling knowledge. As a final note, School Recycling Program Staff and partners will also evaluate making a minimal educational standard a requirement of the program.