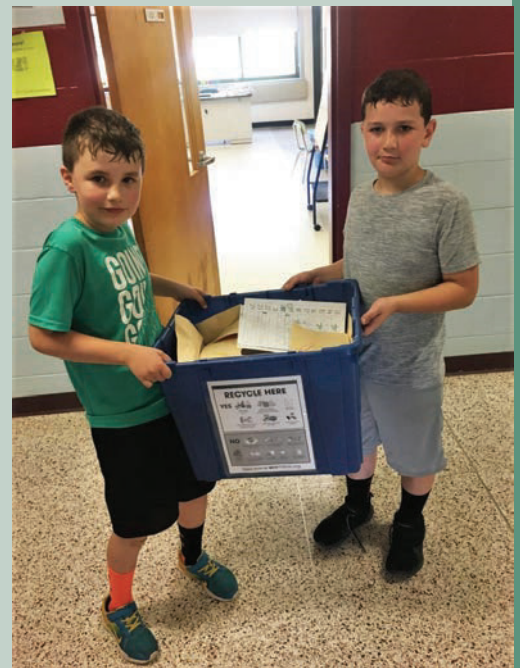


# The Orange County



Port Jarvis High School Celebrates the Launch of Cafeteria Recycling



C.E.S. Students Collecting Recyclables

## 2018-19 Annual Report

# LETTER FROM THE RECYCLING COORDINATOR



The year 2018 signaled a major global shift as recycling took a big blow when China, importer of more than 20 percent of recyclables worldwide, enacted its National Sword policy, banning the import of many grades of recyclable materials. Chinese officials cite significant contamination of recyclables streams with non-recyclable materials as the main cause of the ban, where in the U.S. alone it is reported that rates of contamination are well above 20 percent.

As a response, solid waste managers across the U.S. have had to confront a new reality of scarce markets for materials and the resulting increase in processing rates, leaving some making the decision to landfill recyclable materials. Amidst the dark cloud of negative news stories, Orange County remains hopeful and committed to recycling – choosing to be proactive instead of reactive to the sudden increase in recycling costs by stressing waste prevention, reduction, and composting, as well as recycling “right” in all our outreach.

On one particularly bright note, we have been delighted by the positive response of the schools actively participating in the 2018-19 school year, the second year of the Orange County Green Star School Program (OCGSSP). While last year was highlighted by significant achievement in developing Green Teams and beginning outreach at schools, this year schools were successful in taking a step forward by adapting an approach where responsibility and consciousness are at the apex in their everyday decision making when it comes to the generation of solid waste. While challenges still remain, we are happy to share with you the great work by the students, teachers, administrators, and staff of these participating schools in hopes of being a positive influence to all who wish to be active in the transition to a new, more resilient, sustainable materials management paradigm.

As always, we welcome your input. Should you have any questions, comments, or info on how your school can participate, please feel free to reach out to me via the contact information below.

Regards,

**Ermin Siljkovic**

Recycling Coordinator

Orange County DPW

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## UPDATES FROM THE CLASS OF 2017-18



As with any solid waste generating facility in the country, managers of Buildings and Grounds Departments at Orange County schools were met with a sudden increase in the cost of managing their waste. Many of the schools from the inaugural year remained steadfast by continuing to stay in contact with OCGSSP for information and resources, and by continuing to be active in outreach and education. Others have continued to advance their programs by accomplishing additional tasks, qualifying for the next level in Green Star achievement. A school district worthy of special note is the Warwick Valley Central School District (WVCSD), who after achieving Five Green Stars in 2017-18, continued on a path of success by achieving the prestigious U.S. Green Ribbon of Schools of Excellence Award (ED-GRS) from the U.S. Department of Education for Park Avenue Elementary and Warwick Valley High School in 2018. The two remaining schools, Sanfordville Elementary and Warwick Middle School have both been nominated for the award in 2019. From the Warwick Valley Chamber website:

*"The ED-GRS program recognizes schools where staff, students, officials, and communities have worked together to produce energy efficient, sustainable, and healthy school environments and to ensure the environmental literacy of graduates. The recognition award is part of a larger U.S. Department of Education effort to identify and disseminate knowledge about practices proven to result in improved student engagement, academic achievement, graduation rates, and workforce preparedness, as well as a government-wide goal to increase energy independence and economic security."*

OCGSSP would like to congratulate WVCSD on its successes and is looking forward to partnering with the district, whether in a technical assistance role for its schools, or as means to assist other schools in the county, for many years to come.





## CLASS OF 2018-19 – A STREAMLINED APPROACH



Schools that participated in the initial pilot of OCGSSP provided feedback indicating that data collection was too labor intensive – with Green Teams required to collect and interpret three weeks of waste and recycling measurements – and that the criteria for achieving various levels of “Green Stars” was too rigid, offering little flexibility for schools to articulate their own tailored approaches.

For the 2018-19 school year, OCGSSP was reformatted to allow schools to select up to 19 action items, “à la carte”, each centered on an objective leading toward increased waste prevention and/or recycling. Data collection remains an important part of the program, however at a more manageable scale. Green Teams are now required to conduct a one-day Mini Waste Audit, consisting of counting and measuring the weights of bags of trash and recyclables. The goal is to enable participating schools to dedicate more time in the beginning phases of their work to “winning the hearts and minds” of all members of the school community.



*P.J.H.S. Officials Meeting at G.I.S. to Share Waste Reduction Ideas*



*G.I.S. Mini Waste Audit*

## THE 2018-19 SCHOOL YEAR - BY THE NUMBERS

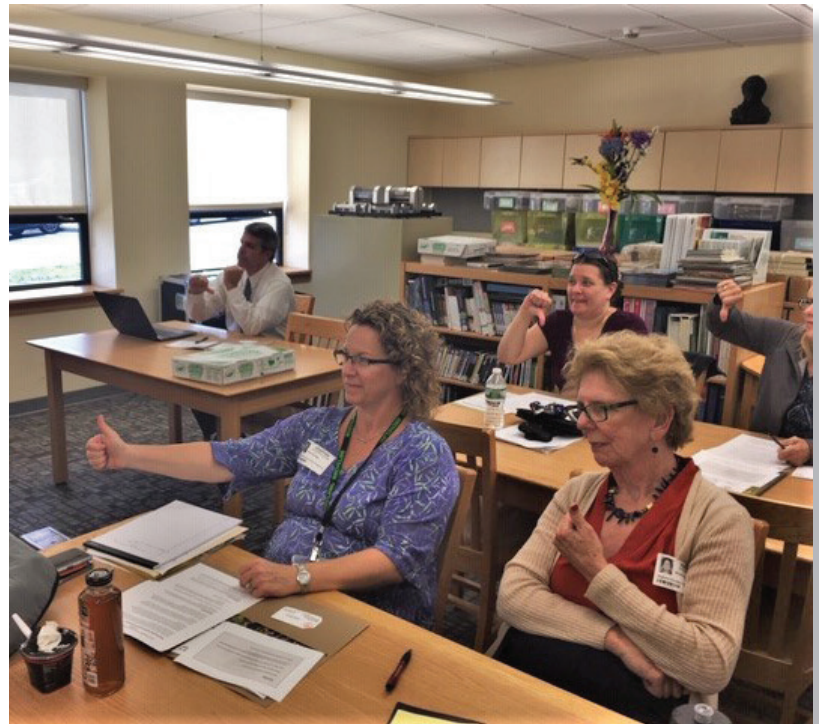
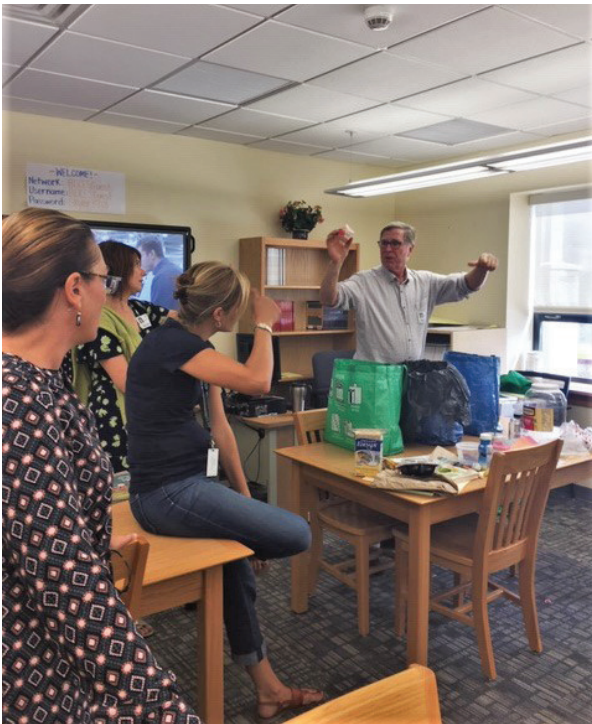
- **8** Supporting Orange County School Districts
- **18** Participating Orange County Schools
- **15,000+** Orange County K-12 Students Reached



# LEARNING TO RECYCLE “RIGHT”



To begin the 2018-19 school year, OCGSSP partnered with Orange-Ulster BOCES Instructional Support Services Department to conduct a professional development course on sustainable materials management (SMM) for teachers and administrative staff of Orange County schools. Major topics of discussion included China’s National Sword Policy and recycling “right” (i.e., decreasing contamination) as a response to the crisis. A slideshow presentation featuring images of contaminated recycling carts with furniture, clothing, and plastic film were displayed, and attendees played an interactive recycling game to help increase their understanding of Orange County’s recycling rules.



*Administrative Staff and Teachers Participating in the Sustainable Materials Management Professional Development Course*

## DID YOU KNOW?

1 in 4 items placed in the recycling bin is not recyclable? These non-recyclable items are contamination. They decrease the salability and value of other recyclables and can be the result of “wishcycling”. The highest occurrence of contamination comes from plastic film (e.g., plastic bags and wrap). These items are not acceptable in any curbside recycling program, but they can be returned to local retail stores.

For more information on what is accepted in single-stream recycling at Orange County transfer stations, visit the following link:

**<https://www.orangecountygov.com/434/Recycling>**



# CONDUCTING MINI WASTE AUDITS



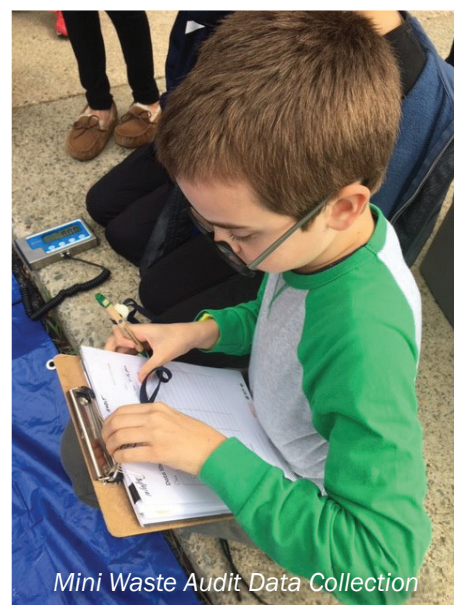
OCGSSP 2018-19 enrollees that completed Mini Waste Audits included: Scotchtown Avenue Elementary School (Goshen CSD), Goshen Intermediate School (Goshen CSD), Crispell Middle School (Pine Bush CSD), Circleville Elementary School (Pine Bush CSD), and Greenwood Lake Middle and Elementary Schools (GWL UFSD). Many schools opted to incorporate an experiential learning component to their Mini Waste Audit by engaging student volunteers with the weighing and recording of waste generated in their school buildings over the course of a typical day. Areas that were measured included cafeterias, sample sets of classrooms, and offices. These records not only created a “snapshot” of each school’s waste performance before implementation of SMM initiatives, but the activity also provided a useful STEM exercise for teachers, as well as a valuable learning experience for students which they can draw upon as they become waste conscious citizens of their schools, homes, and communities. Results from the initial Mini Waste Audits will be compared to future audits in the 2019-20 school year and beyond.



G.I.S. Mini Waste Audit



Digital Scale for Mini Waste Audit



Mini Waste Audit Data Collection



G.W.L.E.S. Students Help Conduct a Mini Waste Audit



G.I.S. Mini Waste Audit Setup



# ESTABLISHING CAFETERIA RECYCLING



According to the U.S. Carton Council, most of the solid waste at schools is generated in the cafeteria. With assistance provided by the Council's grant program, seven OCGSSP participating schools were able to establish cafeteria-based recycling programs. These schools include: Scotchtown Avenue Elementary School (Goshen CSD), Goshen Intermediate School (Goshen CSD), Crispell Middle School (Pine Bush CSD), Circleville Elementary School (Pine Bush CSD), Port Jervis High School (PJ CSD), and Greenwood Lake Middle and Elementary Schools (GWL UFSD). Two supporting components of the cafeteria recycling programs include: (1) emptying liquids before the recycling of cartons and bottles, and (2) utilization of the "Tap-N-Stack" method for trays. These behaviors substantially reduce the weight, volume, and number of trash bags generated each school day, and they also reduce contamination, resulting in a cleaner recycling stream free of liquids, food, and other refuse.



S.A.S. Student Sorting Lunch Waste



S.A.S. Cafeteria Liquids Collection



S.A.S. Cafeteria Ranger



S.A.S. Cafeteria Materials Sorting



C.E.S. Cafeteria Liquids, Recycling, and Trash Separation Containers



# ROLLING OUT SCHOOL-WIDE CONTAINERS



A common practice in many school facilities is the random deployment of “orphan” bins, solo recycling or refuse containers without their companion refuse or recycling container. This practice leads to the misuse of receptacles by forcing users to deposit refuse into recycling bins or recyclables into refuse bins. In order to increase the amount of recyclables captured, as well as to prevent contamination of recycling receptacles with trash, all schools participating in OCGSSP have revamped their waste management programs by grouping recycling and refuse bins together in classrooms, corridors, and other key areas of their facilities and campuses. Some schools have used this program to not only improve capture rates of paper, cardboard, cans, and other recyclable material, but through the collection of returnable deposit bottles they have also created a fundraising mechanism for Green Team projects, class trips, school sponsored charities, or more.



*P.J.H.S. Hallway Dual-Stream Recycling Containers*



*C.E.S. Students Empty Recyclables Into Outdoor Container*

Positive news encourages positive behavior. An overarching goal of OCGGSP is to promote the great work of Orange County schools in waste reduction, recycling, and composting. See the article “Green Star Program Teaching Orange County Students About Recycling” published in the Times Herald Record on May 3, 2019:

**<http://bit.ly/OCGSSPteachingstudents>**



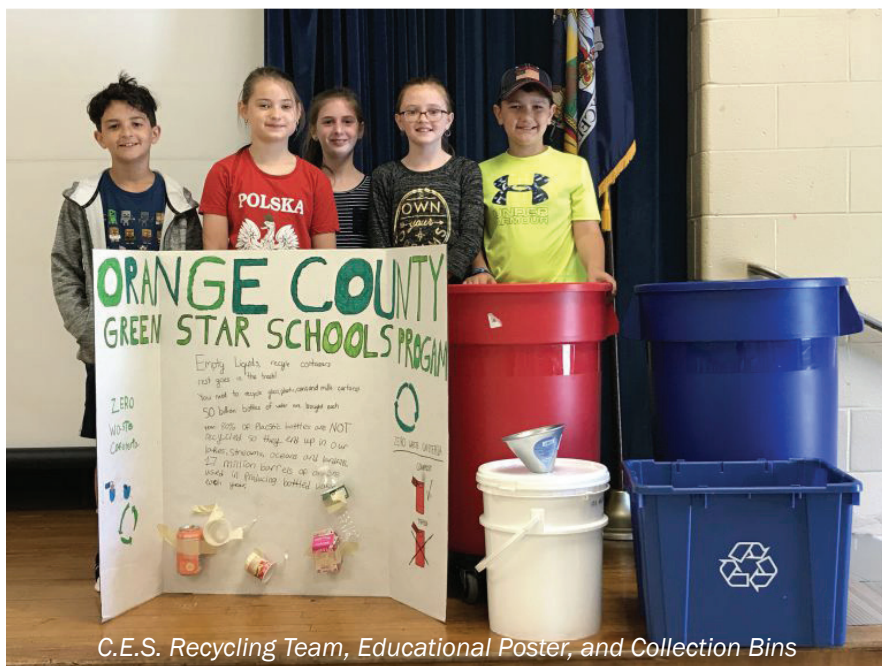
# SCHOOL HIGHLIGHTS & GREEN STAR AWARDS



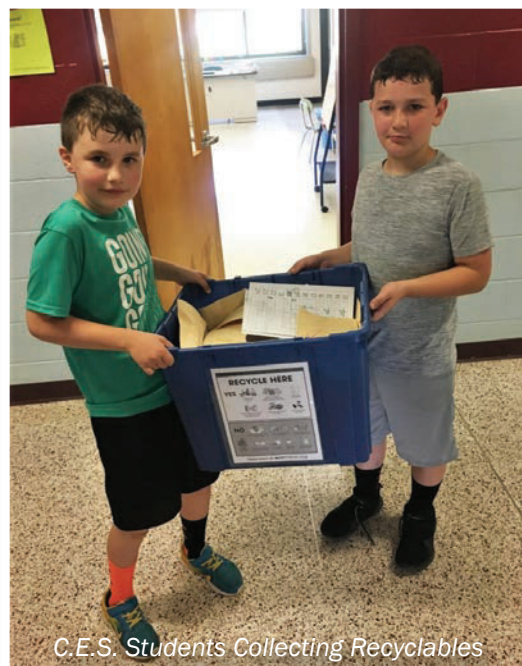
A successful materials management program is characterized by a comprehensive education and outreach campaign ensuring that all members of a school community are aware of their respective programs and how to participate accordingly. The schools below have all achieved Two Green Stars, exemplifying cooperation between students, teachers, staff, and administration, in an effort to address the core waste generating areas of a school through coordinated outreach and special initiatives. Not included in this report are some schools from the Class of 2017-18, omitted not because their initiatives were any less stellar, but because they haven't yet attained their next Green Star. Following are the highlights of the 2018-19 school year.

## **Circleville Elementary School (Pine Bush CSD):** ★★

Circleville Elementary accomplished eleven action items, including pairing recycling bins with refuse containers throughout the school, establishing recycling stations in the school cafeteria, installing electric hand dryers in bathrooms, and others. Mrs. Dowling's Fourth Grade Class took the lead on outreach by organizing a campaign to deliver recycling bins to classes throughout the school and educate their fellow students on how to recycle correctly. The class also produced a slide show promoting the school recycling initiative at an assembly and they had a table at the school's annual Science Night to educate parents as well as fellow students on proper recycling behaviors that they could use at home.



C.E.S. Recycling Team, Educational Poster, and Collection Bins



C.E.S. Students Collecting Recyclables

## Greenwood Lake Elementary & Middle School (UFSD): ★★



In 2018-19, the Greenwood Lake Elementary and Middle Schools both accomplished eleven action items including establishing recycling programs in their cafeterias and in the “back-of-the-house” of their kitchens, supporting waste prevention measures such as the use of condiment dispensers instead of single-use packets, installing water bottle refilling stations throughout the school, and using a composter in their school garden. In order to promote the program, students of the Middle School’s Ecology Elective staffed the cafeteria “recycling center” to help facilitate the sorting of materials, and they provided formal presentations on recycling during lunch to their peers. Students in this elective also conducted a one-day Mini Waste Audit as well as a ten-day audit to determine how much waste was generated during that span. Recycling receptacles were also provided for use during outdoor, extra-curricular activities such as Field Day to ensure that recyclable items could be collected during all waste generating activities.



G.W.L. Elementary School's Waste & Recycling Containers



G.W.L. "Tap 'N' Stack" Tray Method

## DID YOU KNOW?

According to the EPA, 80% of waste generated by schools could be reused, recycled, or composted. Of that percentage, 40% consists of paper products, but note that only clean mixed paper is recyclable. Soiled paper items such as cups, plates, napkins, and paper towels are not recyclable, however they can be composted.

Click the link to see how one Minneapolis, MN school reduced their waste by 80%:

<http://bit.ly/80percentreduction>



### **Scotchtown Avenue Elementary School (Goshen CSD):** ★★



Scotchtown Avenue Elementary School (SAS) accomplished ten action items including the successful establishment of cafeteria recycling led by “Cafeteria Rangers”. These students educated their fellow classmates on separating waste in the cafeteria, increased the number of classrooms with recycling receptacles, and followed up their launch with extensive outreach to students, faculty, and staff. SAS also implemented a special campaign called “Love Our School – Love Our Earth” where each class encouraged students to collect any paper, pencils, and crayons found on the floor. Any items in good condition were saved for reuse, the paper was recycled, and crayons and markers were sent to the art teacher who eventually sent almost 50 pounds of crayons and more than 425 markers to the Crayola ColorCycle Program.



S.A.S. Recycling Program Education Assembly



S.A.S. Mini Waste Audit

### **Minisink Valley High School (Minisink Valley CSD):** ★★

Completing its second school year in the program, Minisink Valley High School achieved its second Green Star by successfully implementing four action items in 2018-19. In addition to pairing recycling bins with refuse containers throughout the school, the MVHS Green Team coordinated an Environmental Club where at least twenty students meet regularly to watch films, facilitate discussion, and carry out recycling awareness initiatives throughout the school. For example, the Environmental Club partnered with the Future Business Leaders of America Club to collect plastic deposit bottles from its recycling bins, which were sorted and brought to redemption centers, generating more than \$400 from approximately 8,500 bottles for its Minisink Cares backpack food security program.



## Crispell Middle School (Pine Bush CSD): ★★



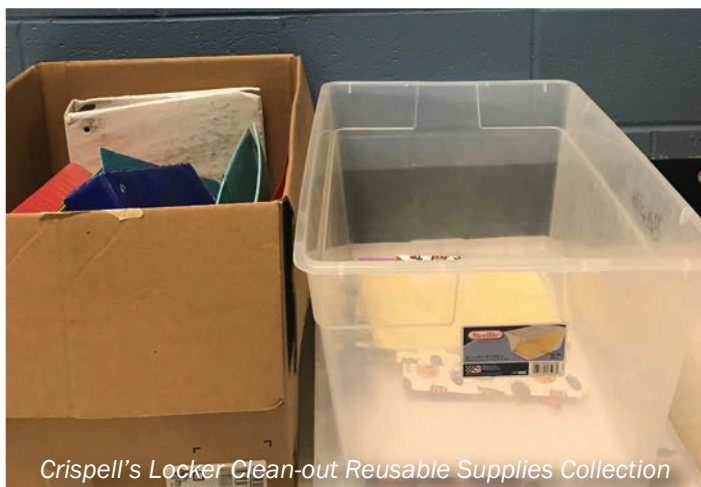
Accomplishing nine action items, Crispell Middle School successfully paired recycling bins with refuse containers throughout the school and installed water bottle refilling stations in an effort to reduce single-use bottle waste. They also conducted a locker room clean-out at the end of the school year, recycling workbooks and notebooks wherever possible as well as recovering any items deemed still usable for the next school year. Furthermore, the Crispell MS Green Team produced and broadcasted video announcements promoting the launch of their recycling programs, and they initiated a plastic film collection program promoting awareness and the recycling of plastic bags and other plastic film as part of its entry into a national competition sponsored by Trex, a plastic lumber and furniture company based in New Jersey.



Crispell Students Donating Reusable School Supplies



Crispell's Plastic Film & Bottles Recycling Containers



Crispell's Locker Clean-out Reusable Supplies Collection



Crispell's Marker Collection for Crayola's ColorCycle Program



## Port Jervis High School (Port Jervis CSD): ★★



Port Jervis High School, also in its second year of OCGSSP, accumulated eight action items and achieved its second Green Star. PJHS grouped recycling receptacles with trash bins, launched recycling in its cafeteria, and undertook key waste prevention measures including installing water bottle refilling stations and electric hand dryers. On the eve of their new initiative's launch, PJ CSD superintendents organized a special presentation that described and promoted the program to special education teachers, aides, and caretaker staff. Thanks to the hard work and dedication of the PJHS Green Team and student volunteers who monitored their cafeteria's "zero waste" stations, this effort eventually resulted in a dramatic reduction of cafeteria generated refuse: from 78 bags per week (~15 bags per day) to 15 bags per week (~3 bags per day). Later in the 2018-19 school year, PJHS students presented their report titled "Tap 'N' Stack" about their school's cafeteria recycling program at the SUNY-ESF Environmental Research Summit, and they won the award for "the Most Outstanding Oral Presentation".



P.J.H.S. Electric Hand Dryer



P.J.H.S. Carton and Bottle Collection



Cafeteria Recycling Reminders at P.J.H.S.



P.J.H.S. Cafeteria Materials Sorting Station with Signage



P.J.H.S. Reusable Water Bottle Refilling Station



## Goshen Intermediate School (Goshen CSD): ★★



Goshen Intermediate School (GIS) successfully accomplished eight action items, achieving Two Green Stars in 2018-19. GIS started the school year with a Mini Waste Audit which was conducted by Mrs. Kennedy's Fourth Grade Class. GIS then helped to implement cafeteria recycling by producing an educational video on how to empty liquids, recycle bottles and containers, and "Tap 'N' Stack" trays. Student volunteers similar to SAS's "Cafeteria Rangers" were organized and engaged to coach their fellow students as they scraped their trays at the end of lunch. GIS conducts a weekly event once a year called "Kindness Week". For the 2018-19 school year, the focus was promoting kindness to the environment, encouraging participation in the school recycling programs and GIS's "Clynk" deposit bottle return program. It is also notable that at the beginning of the school year, Goshen CSD switched from plastic foam lunch trays to compostable trays in its OCGSSP participating schools in hopes of eventually composting the trays once the Orange County food scraps composting facility opens.



G.I.S. "Clynk" Deposit Bottle Return Program



G.I.S. Mini Waste Audit



G.I.S. Recycling Collection



G.I.S. Cafeteria Rangers Demonstrate "Tap 'N' Stack"







# Be Kind to the Earth week April 8-12

## **MONDAY**

### **Straw Free Day**

Drink your beverages in lunch without a straw  
Bonus: Bring empty cardboard egg crates to plant seeds.

## **TUESDAY**

### **Re-Use Day**

Bring in reusable water bottles to use today and in the future. Wear nature themed shirt.

## **WONDERFUL WORDS WEDNESDAY**

Students will make a promise of how they will help the Earth and Reduce plastic by avoiding single use packaging all day long.

## **THURSDAY**

### **Reduce Paper Use**

Use Chromebooks, both sides of paper in class,  
Wear the colors of the Earth

## **FRIDAY**

### **Recycle Cans**

Bring returnable cans to recycle and help raise funds for a Water-bottle refill station. (No glass please)

## COMING UP FOR 2019-20

For the 2019-20 school year, OCGSSP is very pleased to welcome new program participants including Chester Elementary (Chester UFSD), Golden Hill Elementary (Florida UFSD), EJ Russell Elementary (Pine Bush CSD), and others. OCGSSP looks forward to working with this year's class to plan and achieve their sustainable materials management goals.

## JOINING OCGSSP

Are you a teacher, student, parent, principal, or school board member interested in taking your school's commitment to sustainability to the next level? OCGSSP can work with you to reduce waste, cut costs, and increase opportunities for student growth and learning. For more information on how to enroll in OCGSSP, contact Orange County's Recycling Coordinator, Ermin Siljkovic, by phone (845) 291-3246 or email [esiljkovic@orangecountygov.com](mailto:esiljkovic@orangecountygov.com)

## ACKNOWLEDGEMENTS

OCGGSP would like to thank the Syracuse University Center for Sustainable Community Solutions (SU-CSCS) for assistance with creating the 2018-19 OCSSP Annual Report. OCGSSP would also like to express sincere thanks to all of the participating school administrators, faculty, staff, students, and other supporters for their inspiring work and for helping to make the 2018-19 school year a success!



*G.I.S. Recycling Poster*



**SYRACUSE UNIVERSITY**  
**CENTER FOR SUSTAINABLE**  
**COMMUNITY SOLUTIONS**