

corner of Harvard Road and Green Road). The majority of undeveloped land in the watershed is located in this Upper section. Several acres of wooded headwaters are on private property at the northeast corner of Harvard Road and Green Road. The Jacobs Group owns this land as part of their Chagrin Highlands mixed office complex which has been under development for the past several years. There are also several open areas within Highland Hills owned by the City of Cleveland. These areas include the driving range at the southeast corner of Harvard Road and Green Road, Camp Forbes located on Harvard Road just east of the driving range, and several parcels within the Cleveland Enterprise Park. A unique feature of this Upper Watershed is a designated nature preserve which follows the stream corridor through Cleveland Enterprise Park.

Within the Middle Watershed, the stream has a much more limited extent in where and how it can travel. It squeezes through the two buildings at South Pointe hospital on Warrensville Center Road in Warrensville Heights, through the Longbrook neighborhood located just south of the hospital, and eventually makes its way to forested land at the Sherwin Williams Automotive complex. The majority of open space in this section includes the private property owned by Sherwin Williams and the City of Cleveland's Kerruish Park. Currently there is infringement by property owners along the section of the stream between Miles and South Miles Road. Kerruish Park has a large detention basin located south of Elmer Avenue and South Miles Road which makes up the largest open space in this section of the watershed. In addition, there is a forested portion of Kerruish Park to the north of Tarkington that is currently undeveloped open space. The Greenhurst neighborhood, located south of I-480 in Maple Heights, also provides some smaller wooded areas of greenspace which follow the stream corridor.

The Lower Watershed has a considerable amount of open space with Cleveland Metroparks Garfield Reservation located off Broadway in Garfield Heights, the quarries located north and east of Garfield Reservation, across Broadway and the Railroad Tracks, and Calvary Cemetery located on Miles Road straddling the border of Cleveland and Garfield Heights. One of the most unique features of this section and the entire watershed is the Mill Creek Falls located north of the intersection of Warner Road and Turney Road in the Cleveland. South of the falls, the stream is pinched between two landfills until it reaches Bacci Park in the Village of Cuyahoga Heights and just south of this, the mouth of the Mill Creek joins the Cuyahoga River.

Schools and Educational Opportunities

Within the actual boundaries of the Mill Creek watershed, there are 39 school buildings, serving approximately 18,800 students, across eight school districts. A complete list of schools in the watershed can be found in Appendix D.

One long-range goal is for every school to be within walking or biking distance and accessible to an open space, natural, outdoor classroom. All of the educational professionals involved in the Mill Creek Partnership agree that, not only are outdoor, "natural" classrooms excellent resources for teaching science and nature, they are also fabulous spaces for teaching mathematics, art, music, history and other subjects as well. The educators also agree that these spaces, when creatively designed, can be simultaneously used as spaces for exercise and physical activity and the process of walking or biking to and from these spaces can be in itself part of a life-long ethic of exercise and fitness.

Listed below are brief descriptions of current and potential physical (natural) assets, along with programming and collaborative opportunities for each school.

School

Opportunity

Upper Watershed

Bryden Elementary	Daylighted tributary close by (residential properties); close to Shaker Median Park (Beachwood City Park) and Warrensville Township Cemetery; close driving distance Highland Park Golf Course and Canterbury Golf Course; close to Cuyahoga County Public Library Beachwood Branch
Mercer Elementary	Walking distance to Beachwood City Park; close to Cuyahoga County Public Library Beachwood Branch, Canterbury Golf Course, Warrensville Township Cemetery; collaborative opportunities with Bryden Elementary
Phoenix Village Academy	Immediate adjacency with high quality woodland/wetland behind Randalwood Elementary; walking distance of Cuyahoga County Public Library Warrensville Branch and Cleveland Memorial Gardens Cemetery; collaborative opportunities with Randallwood Elementary and Warrensville Heights High Schools well as Beachwood High School
Randallwood Elementary	Adjacent to high quality woodland/wetland on private church property and City of Cleveland Property; adjacent to Cuyahoga County Public Library Warrensville Branch and Cleveland Memorial Gardens Cemetery; close to Cleveland Clinic Foundation South Pointe; Very high potential for nature, math and health fitness programming
Warrensville Heights Middle School	Very close to Alameda Parkway Stream Restoration in Warrensville Heights and Sherwin Williams back floodplain; close to woodland/wetland behind Randalwood Elementary
Warrensville Heights High School	Directly across Northfield Road to high quality woodland/wetland on private church property; walking distance to Cuyahoga County Public Library Warrensville Branch and Cleveland Memorial Gardens Cemetery; close to Cleveland Clinic Foundation South Pointe; Very high potential for nature/science, math and health fitness programming; collaborative opportunities with Beachwood High School and Phoenix Village Academy

*Beachwood High School Adjacent to Cuyahoga County Public Library Beachwood Branch; very close/ walking distance of Shaker Median Park, headwaters; driving distance of wetland in Warrensville - collaborative opportunity w/ Warrensville Heights High School.

Middle Watershed

Archbishop Lyke-St Henry Elementary Lee-Harvard area; backyard has woodland remnants which likely drain into a buried tributary leading towards Kerruish Park; adjacency with Whitney Young High School; very close to City of Cleveland’s Idalia Park with recently installed rain garden

Charles W Eliot Elementary Adjacent to Fredrick Douglas Park; close driving distance to Kerruish Park and Garfield Reservation

Emile B Desauze Elementary Walking distance to Kerruish Park; very close to vacant industrial lot along the upper ridge of Kerruish Storm Water Facility: recreation/fitness; natural floodplain; natural woodland/wetland (Kerruish north) all within walking distance

Gracemount Elementary Close to Fredrick Douglas Park; driving distance of Kerruish Park

John F Kennedy High School Adjacency to Cleveland Public Library Harvard-Lee Branch, very close to Whitney Young and Archbishop Lyke-St. Henry; remnant woodland/wetland with intermittent tributary adjacent/south of Whitney Young; close (walking) to Idalia Park (recreation); driving distance of Kerruish Park

Maple Heights High School Very close to Cunwillo pocket park with remnant woodland and intermittent Mapletown branch tributary; driving distance from Intermodal transportation center - educational opportunity; also to Kerruish Park

Milkovich Middle School Very close to Cunwillo pocket park with remnant woodland and intermittent Mapletown branch tributary; driving distance from Intermodal transportation center - educational opportunity; also to Kerruish Park

Raymond Elementary School Not yet known

Rockside Elementary	Close to Benhoff Park (recreation) and walking distance from Southgate/Edgewood Park; adjacent to private cemetery; driving distance to intermodal transportation center, Cunwillo Park, Garfield Reservation, Mill Creek History Center; collaborative opportunities with St. Monica, William Foster and Dunham Elementary
Ramah Junior Academy Elementary	Directly across from Kerruish Park; walking distance from remnant woodland/ Busby run tributary
Trinity High	Open greenspace on campus; existing underground storm water management unit; current and future Marymount campus renovation projects provide storm water and land management demonstrations; Wolf Creek on site; Cleveland Clinic Foundation health/wellness on site; very close proximity to Garfield Reservation
Westwood Elementary	Adjacent and on west ridge of floodplain valley of Sherwin Williams back property via residential neighborhood; close to Cleveland Clinic Foundation South Pointe; potential for health and fitness programs; driving distance to Cleveland Enterprise Park Nature Preserve (platted), woodland/wetland behind Randalwood Elementary
Whitney Young High School	Southern property has remnant woodland/wetland with intermittent tributary; adjacent to Idalia Park (recreation); collaborative opportunities with John F Kennedy High School, Archbishop Lyke-St. Henry; driving distance Kerruish Park
Lower Watershed	
Archbishop Lyke-St Timothy Campus	Adjacent to buried Cranwood Run greenway (E. 131st St.); connection to west end of Calvary Cemetery; Reasonably close to Garfield Reservation
Eastwood Elementary	Adjacent to Cleveland Clinic Foundation South Pointe Hospital; strong health fitness program potential; walking distance to nature preserve at Cleveland Enterprise Park; close to Alameda Parkway Stream Restoration and Sherwin Williams back property
Elmwood Elementary	Close to Cuyahoga County Library Garfield Heights Branch and Marymount/Trinity campus; health and fitness program opportunities; walking distance to Garfield Reservation Upper entrance; collaborative opportunities with John Paul II Academy Elementary and William Foster Elementary

Garfield Heights High School	Walking distance to Garfield Reservation; adjacent to Crudele Park (recreation, could be storm water management demonstration site); close to Marymount/Trinity campus; high collaboration opportunity for both high school and health and fitness programs
Harvard Avenue Community School Elementary	collaborative opportunity with Robert Jamieson Elementary
Holy Name Elementary	Within (heavy traffic zone) walking distance of Mill Creek Falls and History Center; Morgana Run Trail (just outside the watershed). Reasonably close to Garfield Reservation and Calvary Cemetery
John Paul II Academy Elementary	Close yet not walking distance to Garfield Reservation; close walking distance to Marymount/Trinity campus, Wolf Creek Tributary; walking distance to Cuyahoga County Public Library Garfield Heights Branch
Maple Leaf Intermediate Elementary	Driving distance to Ohio and Erie Canal, Ohio and Erie Canal Towpath Trail and Cuyahoga River; possible collaborative opportunities with St. Monica, Rockside and William Foster Elementary
Miles Elementary	Close to Calvary Cemetery; driving distance to Garfield Reservation
Miles Park Elementary	Very close (walking) to Mill Creek Falls and History Center; bikable to Garfield Reservation and Calvary Cemetery; collaborative opportunities with Holy Name Elementary, Warner Elementary, Miles Elementary, John Paul II Academy Elementary
Robert H Jamison Elementary	Near Glendale Park (pocket park); driving distance to Garfield Reservation
Warner Elementary	Very close (walking) to Mill Creek Falls and History Center; bikable to Garfield Reservation and Calvary Cemetery; collaborative opportunities with Holy Name Elementary, Miles Park Elementary, Miles Elementary, John Paul II Academy Elementary; walkable to Mill Creek Subdivision and access to Mill Creek
William Foster Elementary	Close to Cuyahoga County Library and Marymount/ Trinity campus; driving distance to Garfield Reservation, collaborative opportunity with Elmwood and John Paul II Academy Elementary
*Cuyahoga Heights Schools	School building walkable to Bacci Park, Ohio and Erie Canal Towpath Trail and Cuyahoga River; drivable to Mill Creek Falls and History

Center, Garfield Reservation; Canalway Reservation.

*Indicates school is located just outside the watershed boundary

Existing Nature Based and Environmental Programs

Cleveland Metroparks Garfield Reservation (Information forthcoming from Metroparks)

-

School Specific Programs: (Information to be provided by each school)

-

-

-

-

Cuyahoga Soil and Water Conservation District

Backyard Habitat Stewards - Individuals attend training sessions to become certified Backyard Habitat Stewards that can help promote and encourage the principals of watershed protection as they assist community residents to create backyard habitats that are environmentally health and wildlife friendly.

Envirothon is a competitive outdoor team event that offers a unique, enjoyable learning experience. This annual competition allows teams of five high school-aged students to demonstrate their knowledge of environmental science and natural resource management. The teams exercise their training and problems-solving skills in a competition centered on five universal testing categories: Soils, Aquatics, Forestry, Wildlife, and Current Environmental Issues.

Stream Monitoring efforts are designed to gauge biological health and four key water quality indicators: dissolved oxygen, temperature, turbidity, and pH while learning about water quality and water pollution.

Life Depends on Water – An online water quality handbook which provides a variety of lessons, pre and post testing, web quests and service learning projects.

Workshops for Teachers (offered through a variety of environmental organizations and nature centers usually for a minimal fee)

Healthy Water Healthy People is an innovative water quality education program sponsored by Project WET and the Hach Scientific Foundation, offers hands-on activity guides, testing kits, training, and much more.

Project WET is a collection of innovative, water-related activities that are hands-on, easy to use, and fun! Project WET activities incorporate a variety of formats, such as large and small group learning, whole-body activities, laboratory investigations, discussion of local and global topics, and involvement in community service projects. Project WET provides educator workshops in which participants receive the K-12 curriculum and activity guide.

Project Learning Tree is an award winning, multi-disciplinary environmental education program for educators and students in Pre-K through grade 12.

Project Wild is a supplementary education program emphasizing awareness, appreciation, and understanding of wildlife and natural resources. Whether you teach science, math, language arts, social studies, or physical education, Project WILD can spark a new interest for your students and provide new and exciting ways to approach traditional subjects.

Wonders of Wetlands – A comprehensive introduction to wetland ecology through a study of the three parameters of wetlands (vegetation, soils, and hydrology) as well as wetland functions and values. This program features K-12 hands-on, inquiry-based, cross-curricular activities.

Planning of Wetlands - This program offers a step by step process for creating, restoring or enhancing a wetland on school grounds, or within the community. It incorporates activities that allow students to fully participate in designing, preparing, and monitoring a schoolyard wetland, and utilizing it as an outdoor classroom.

Ohio Environmental Education Fund Grant Writing Workshops – Help participants understand the grant writing process. This workshop covers information on funders, common mistakes, linking objectives, budget and timelines, building support for the project, etc.

Public Libraries

Public Libraries are additional centers of learning. Fortunately there are two library systems serving the Mill Creek Watershed: the Cleveland Public Library and the Cuyahoga County Public Library. There are four public libraries within the watershed and one that is located just outside the watershed boundary. All five of these libraries can serve as continuous learning opportunities for watershed residents. A listing of these libraries are as follows:

Cuyahoga County:

Garfield Heights Branch
Maple Heights Branch
Warrensville Branch
*Beachwood Branch (just outside of the watershed)

Cleveland:

Harvard-Lee Branch

The Cuyahoga County Library System has joined the Mill Creek Partnership with the intention of coordinating both science and public health programs in a given community to compliment those

programs being offered to the students within the schools there. They are also involved in the JASON Project (see description below):

The JASON Project – A nonprofit subsidiary of the National Geographic Society, JASON connects young students with great explorers and great events to inspire and motivate them to learn science. Its core curriculum units are designed for 5th – 8th grade classrooms but are flexible enough to be adapted for higher or lower grades.

Operation: Resilient Planet

This curriculum unit will take students to Earth's critical ecosystems to investigate nature's strategies for regeneration, learn ecosystem management by taking on the roles of researchers and policymakers, understand pressures from human induced changes and recognize their responsibility for defending biodiversity.

Health, Nutrition and Fitness

Other than the communities adjacent to the Cleveland Metroparks Garfield Reservation, much of the Mill Creek population is limited in access to space for walking, jogging and active recreation. Awareness of and practice of nutritional diet is likely typical of the middle class urban and inner ring population profile. The strong presence of major healthcare institutions, like the Cleveland Clinic and University Hospitals within the watershed provide a strong resource for outreach and education. The County Public Library system is also highly committed to applying its programming resources for improving public health.

The Health and Wellness Team articulated that the watershed can be a platform for driving the following objectives:

Improve the nutrition and fitness of Mill Creek residents and workers through an emphasis on outdoor activity.

- Connect current and future greenspace through additional trails and greenways
- Actively promote access to Mill Creek's natural assets, community assets, and connections between
- Increase the number of activities/programs in outdoor areas
- Increase access to fresh, affordable and healthy food
- Educate residents on healthy foods and healthy food preparation

Increase the awareness and understanding of the relationship between watershed health, and human health.

- The creation of accessible outdoor learning spaces, easily accessible to schools, and a system of shared programs for teaching a variety of subjects for all ages
- Using spaces for experiential learning aimed at nutrition and fitness
- Active and ongoing coordination with Cleveland Clinic Foundation, University hospitals, and the Cuyahoga County Board of Health