

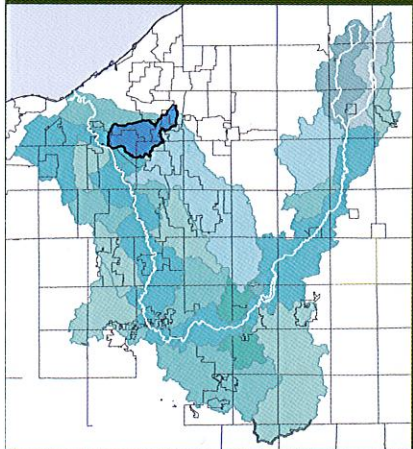
# The Mill Creek Watershed



Mill Creek gathers the water that falls on the land throughout the Mill Creek watershed. The water in the creek flows into the Cuyahoga River and is carried to Lake Erie.

The water in Lake Erie is the source of the drinking water that comes out of the faucets of the homes and businesses of Mill Creek.

What comes out of the faucet started as rain on your yard or street.



The Mill Creek watershed lies near the end of the Cuyahoga River watershed.

It includes all or part of these communities:

- Beachwood
- Shaker Heights
- Highland Hills
- Cleveland
- Warrensville Heights
- North Randall
- Maple Heights
- Garfield Heights
- Cuyahoga Heights
- Valley View



## What is a watershed?

A watershed is an area of **land** where all the rain flows into the same creek, river, or lake.





## Problems

### Flooding

When too much rain or snowmelt runs across the surface and fills streams to overflowing, or too much stormwater fills the sewer system, the water has nowhere to go but onto streets or into basements.

- Large areas of hard impervious surfaces like roads, parking lots, driveways, roofs, and lawns mowed too low don't let water seep down into the soil.
- Streams that have been made straight or narrow can't hold as much water as natural streams.
- Loss of wetlands through development means there isn't enough stormwater storage.

### Erosion

When stormwater rushes directly over streambanks, the soil erodes into the stream, making it shallower and smothering aquatic life.

- Lack of vegetation, mowing to the edge, or pavement along streambanks (riparian areas) doesn't provide a buffer that could absorb and slow stormwater flow.

### Degraded habitat for aquatic life

Urbanized streams don't provide the food, shelter, and oxygen the fish need.

- Lack of streamside tree cover keeps leaves from falling to become organic food for aquatic life.
- Runoff from hot asphalt surfaces heats up the water.
- Culverts and channels lined with concrete don't provide habitat for living things.

### Poor water quality

Urban runoff pollutes the water in streams and Lake Erie.

- Bacteria from sanitary sewer overflows during heavy rains makes its way into streams and to the lake, making it unhealthy to use Lake Erie beaches.
- Pollution from automobile fluids, chemicals, fertilizers, and pesticides gets carried into streams.
- Litter washing into storm drains degrades and contaminates streams, and ends up on Lake Erie beaches.

## Solutions

### Softer surfaces, wider streams

More green surfaces and less hard surfaces let water percolate into the soil rather than run into streams or drains.

- Replacing traditional paving with **permeable paving** lets water filter down into the soil.
- **Rain gardens** in low spots hold rainwater and use native plants with deep roots that open the soil, direct water downward, and absorb a lot of water.
- **Bioswales** take runoff from paved surfaces and hold, slow, and filter runoff before it goes into the storm sewer.
- Giving streams room to meander lets them hold more water, and restoring **floodplains** gives them room to overflow.

### Streamside (riparian) buffers

Trees, shrubs, tall grass, and native plants interrupt and absorb stormwater and their roots keep soils in place.

- **Trees** growing along streams, or uphill from streams or storm drains, absorb a lot of water quickly. Their canopies work like umbrellas, and their roots stabilize soils.
- **Letting grass grow higher** along the edge of streams, and planting shrubs, lets deep roots keep soil from eroding.

### Restoring streams restores life

Healthy streams have cool water, and places for fish to find food and shelter.

- **Naturalizing** streams gives aquatic life the habitat it needs.
- **Reducing runoff from hot, hard surfaces**, and **planting trees** to shade streams keeps water temperatures cool.

### Clean streams come from clean neighborhoods

Keeping pollution out of the water is everyone's business.

- **Reducing stormwater** into drains, and repairing cross-connected residential storm and sanitary sewers reduces bacteria.
- **Picking up dog poop** keeps bacteria out of streams.
- **Stopping littering** and picking up litter before it gets into the storm drain reduces pollution.
- **Regular automobile maintenance** keeps fluids from washing off parking lots and driveways. Keeping motor oil and cooking oils out of storm drains keeps water clean.
- Using **less fertilizer** and pesticides reduces pollution.

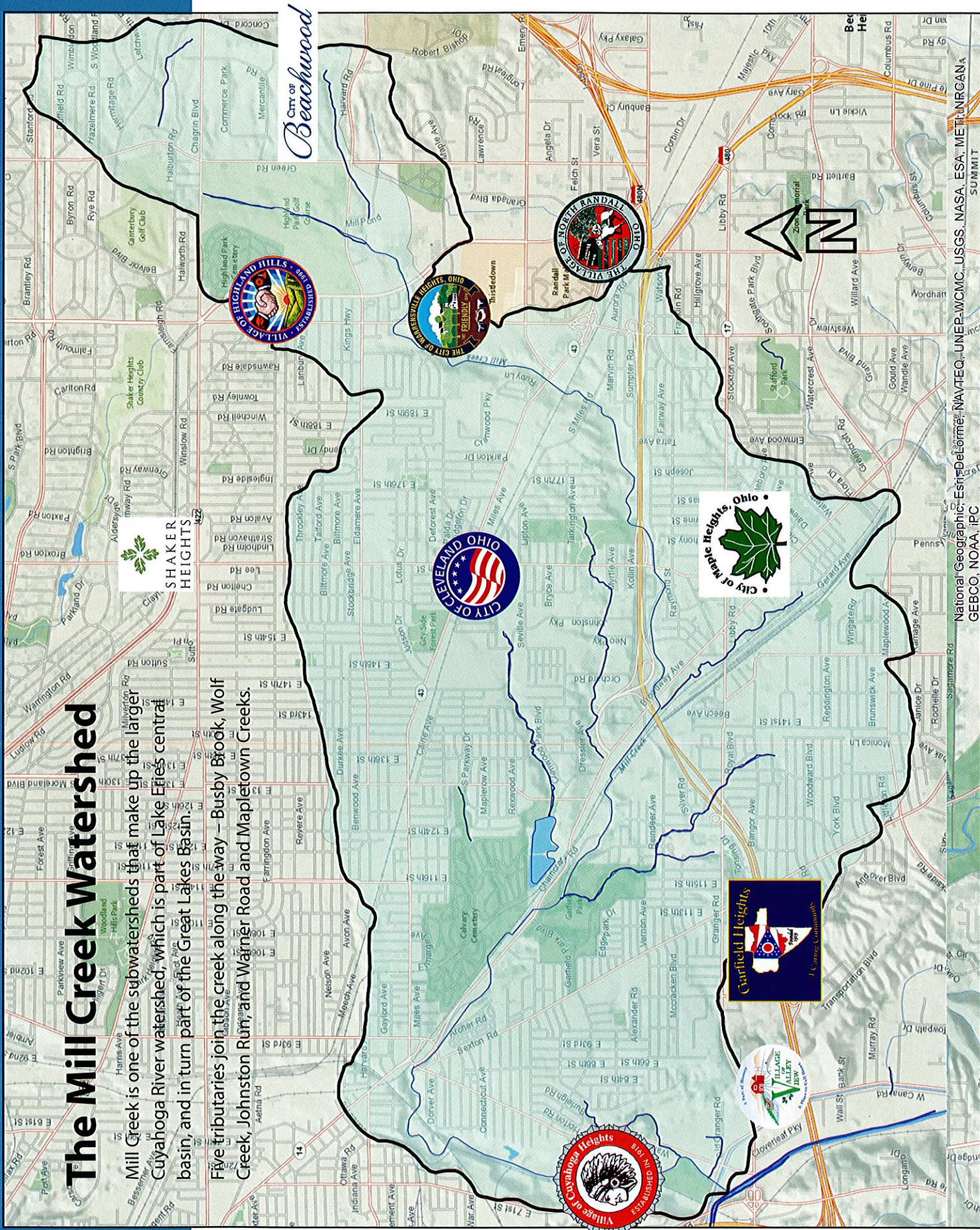




# The Mill Creek Watershed

Mill Creek is one of the subwatersheds that make up the larger Cuyahoga River watershed, which is part of Lake Erie's central basin, and in turn part of the Great Lakes Basin.

Five tributaries join the creek along the way – Busby Brook, Wolf Creek, Johnston Run, and Warner Road and Mapletown Creeks.





# **Mill Creek** Watershed Partnership

The Mill Creek Watershed Partnership is a community-based organization of citizens, businesses, governments, agencies, and community groups dedicated to working together for the improvement of the Mill Creek watershed.

It is staffed by a watershed coordinator, and supported by a technical advisory committee.

- Village of Cuyahoga Heights
- Village of Valley View
- City of Garfield Heights
- City of Cleveland
- City of Warrensville Heights
- City of Maple Heights
- Village of North Randall
- Village of Highland Hills
- City of Beachwood
- City of Shaker Heights
- Harvard Community Services Center
- Union Miles Development Corporation
- Slavic Village Development

#### Advisors

- Northeast Ohio Regional Sewer District
- Cuyahoga County Planning Commission
- Cuyahoga County Board of Health
- Cuyahoga River Restoration
- Cuyahoga Soil & Water Conservation District

*With a drop of 48 feet, Mill Creek Falls is the largest waterfall in Cuyahoga County.*

*It powered the first grist and sawmill in the area, and is located at the north end of the Cleveland Metroparks Garfield Park Reservation.*

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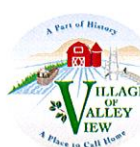
*Learn more at*

[millcreekpartnership.org](http://millcreekpartnership.org)

*and*

[facebook.com/millcreekpartnership](https://facebook.com/millcreekpartnership)

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*CITY OF*  
**Beachwood**



CUYAHOGA COUNTY  
 PLANNING COMMISSION

CUYAHOGA COUNTY  
 BOARD OF HEALTH

 **Northeast Ohio  
 Regional Sewer District**



**CUYAHOGA  
 RIVER  
 RESTORATION**

