



New Franklin Riparian Setback Community Guidebook

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New Franklin's Riparian Setback Ordinance

WHAT EXACTLY IS A RIPARIAN SETBACK?

The word riparian means “relating to or situated on the banks of a river.” Environmental professionals use the word riparian to refer to streams and rivers, but it has also been used to refer to lakes, ponds, and even wetlands. A riparian setback, also called a riparian buffer, is an area that extends beyond the banks of a river, stream, or other body of water. This zone has been called an “interface” between terrestrial (land) and aquatic (water) environments.

These setback areas are protected from development and are planted with native vegetation. In turn, these setbacks reduce flooding, filter pollutants, and prevent erosion. Riparian setbacks work to improve overall water quality. They also provide habitat for native species, increase recreation opportunities, and increase aesthetic value. Many communities have adopted a riparian buffer ordinance to safeguard water quality.

WHAT IS NEW FRANKLIN'S RIPARIAN SETBACK ORDINANCE?

The City of New Franklin's riparian setback ordinance (Section 1100.01 - Riparian Development Setback Regulations) can be found in Article 11 | Natural Resource Preservation Provisions of the city code. The chart below lists the details of each setback distance as listed in the ordinance.

The minimum setback distances are determined by the area that drains into a river or stream. Larger drainage areas require a “deeper” buffer, which means they need a larger strip of native vegetation and other natural features to properly slow and store water from flooding and precipitation events. Larger drainage areas have more stormwater and other pollution to process and store before it reaches a stream or other body of water. Wetland areas require a different buffer, usually with depth added to the buffer for better quality wetlands. Wetlands are graded as Category 1, 2, or 3 based on their quality.

<u>MINIMUM SETBACK DISTANCE</u>	<u>DRAINAGE AREA</u>
300 ft on each side of stream	Draining an area > 300 mi ²
100 ft on each side of stream	Draining an area > 20 mi ² < 300 mi ²
75 ft on each side of stream	Draining an area > 0.5 mi ² < 20 mi ²
50 ft on each side of stream	Draining an area > 0.05 mi ² < 0.5 mi ²
30 ft on each side of stream	Draining an area < 0.05 mi ²
<u>MINIMUM SETBACK DISTANCE FOR WETLANDS</u>	
50 ft beyond the outer boundary	Category 3 wetlands
30 ft beyond the outer boundary	Category 2 wetlands
No additional setback	Category 1 wetlands

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New Franklin's Riparian Setback Ordinance

WHY DID NEW FRANKLIN ADOPT THIS ORDINANCE?

The City of New Franklin adopted this ordinance to protect environmental and water quality within the streams, rivers, and other waterbodies of the city. New Franklin sought to reduce flooding and its impacts, stabilize streambanks and reduce erosion and sedimentation, reduce pollutants in streams, protect native species while minimizing invasive species, and to protect itself financially. Eroding stream beds, flooding, and unclean, unusable water create a costly problem that many communities cannot afford. By acting to prevent and even reverse some of these issues, the city is able to put funds towards other projects and needs.

HOW DO YOU BENEFIT FROM THE ORDINANCE?

For those individuals who live alongside New Franklin's streams, the benefits range from aesthetic to economic. These individuals can enjoy the increased aesthetic value that riparian buffers provide. They also will experience reduced flooding and erosion on their properties, which saves money and preserves the existing structures and landscape. Even individuals that don't live directly adjacent to streams will benefit from reduced flooding on their own properties, as well as increased water quality when they do visit the city's streams and rivers.

HOW DOES THE COMMUNITY BENEFIT FROM THE ORDINANCE?

The community benefits from the ordinance in two main ways. The first way the community benefits is financially. When New Franklin protects its streams and rivers, it will not have to pay for damages to roads and buildings, impairments to drinking water sources, or other negative impacts on the water supply. Instead, the city's money can be spent on community projects, infrastructure repairs or improvements, or education programs. By sustaining the streams that flow through the township, New Franklin is financially sustaining itself as well.

The second way the community benefits is recreationally. Clean streams with robust biodiversity enable residents to enjoy all that the natural world has to offer: swimming, kayaking, fishing, birdwatching, and much more. Cleaner water is great for human residents but will also benefit the native wildlife in New Franklin. Fish, macroinvertebrates, and amphibians are just some of the animals that will directly benefit from clean streams free from human caused erosion, sedimentation, and pollutants.

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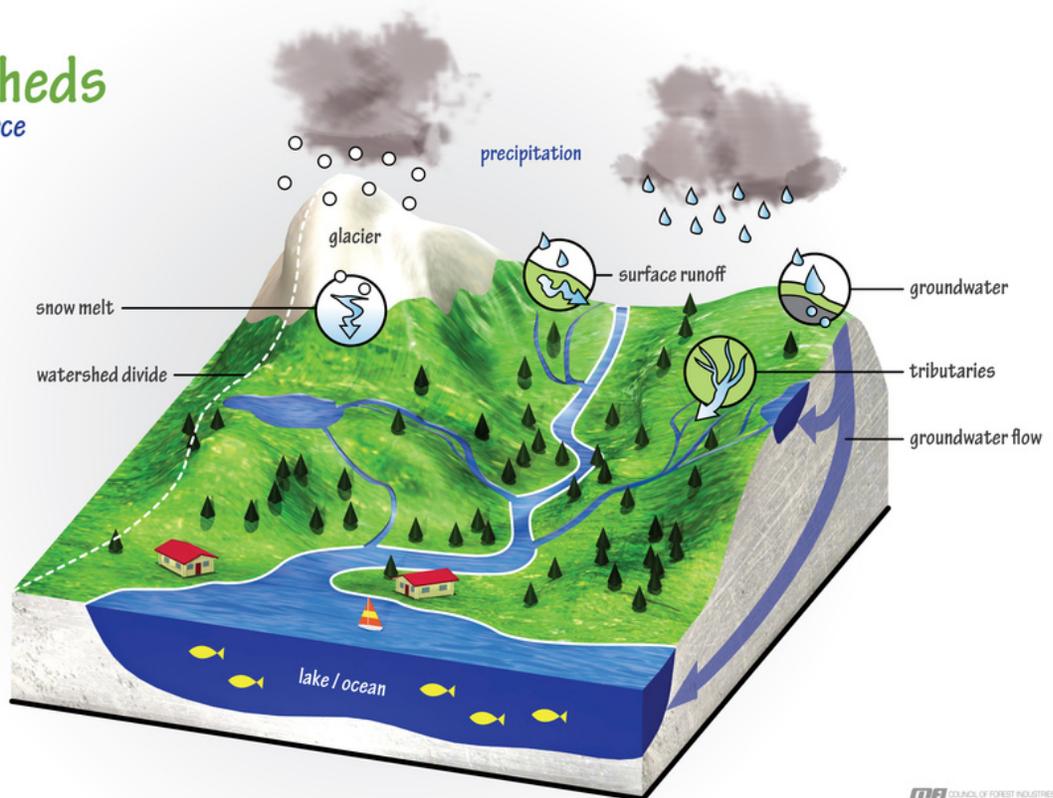
Stream Dynamics Explained

WHAT IS A WATERSHED?

A watershed is an area of land that drains water into a river, stream, bay, or other body of water. Every body of water, no matter how big or how small, has a watershed. Therefore, everyone lives in a watershed! Everywhere you go is also part of a watershed, and it is important that water can flow through a watershed and into a stream.

Watersheds vary in size and water moves both aboveground and belowground. Smaller watersheds, like Yellow Creek or Pigeon Creek flow into larger rivers and their watersheds, like the Cuyahoga River or the Tuscarawas River. The Cuyahoga River is part of the Lake Erie drainage basin, and the Tuscarawas River flows into the Ohio River drainage basin. Every action we take impacts not only our immediate watershed, but other watersheds as well!

watersheds our water source



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Stream Dynamics Explained

HOW DO STREAMS BEHAVE WITHOUT INTERVENTION?

Rivers, streams, and other bodies of water act to form a branching network to carry water throughout a watershed. In a stream system with minimal human development, a wide variety of waterbodies would be present. This includes wetlands and floodplain areas that could store precipitation and flood waters. While flooding occurs naturally, it does not happen as frequently as it does in an urbanized system.

HOW DOES PROPERTY PROTECTION LEAD TO WATERSHED PROTECTION?

By protecting streamside property and other vulnerable areas, you can act to protect your watershed. Property protection via riparian setbacks reduces flooding, provides habitat for native species, increases water quality, and raises environmental awareness. As a bonus, proper management of riparian areas will mitigate these issues throughout the rest of a property.

IMAGE CREDIT: LAKE HELENA WATERSHED GROUP



HOW DO STREAMS BEHAVE WITH INTERVENTION?

As populations have grown and urbanization has increased, watersheds have been disrupted by development and water is not able to follow its natural path. Urbanization results in huge areas of impervious surfaces (think roofs, roads, and parking lots) that don't allow water to infiltrate into the ground and flow into nearby streams. This has led to flooding, habitat loss, and other environmental issues. By setting aside buffers or setbacks along streams, we can mitigate some of these issues and protect water quality in our watersheds.

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New Franklin's Watershed Information

WHICH RIVERS AND STREAMS FLOW THROUGH NEW FRANKLIN?

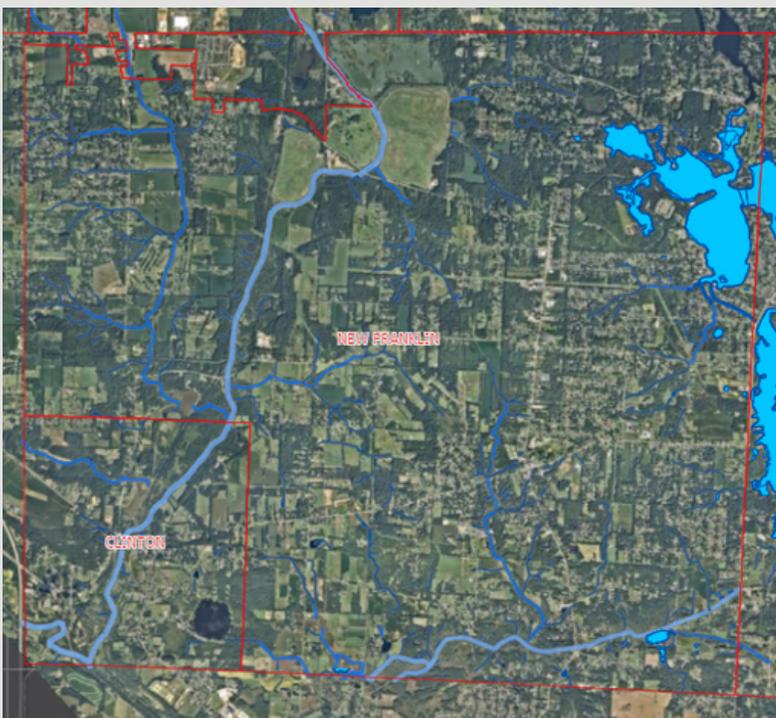
The majority of the City of New Franklin falls within the Pancake Creek watershed. Pancake Creek is classified as "impaired" by the United States Environmental Protection Agency (EPA). In addition to Pancake Creek, New Franklin sits within the Lake Lucern watershed, which then feeds into the Nimisila Creek watershed.

These areas have experienced heavy urbanization and these impacts can be seen throughout Pancake Creek's watershed. Pancake Creek flows into the main stem of the Tuscarawas River at the county line, which continues south to the Ohio River. After the Tuscarawas River joins the Ohio River, the Ohio River eventually flows into the Mississippi River. Even a small watershed like Pancake Creek can have a significant impact on the larger watersheds around us!

NEW FRANKLIN'S WETLANDS, LAKES, AND PONDS

The biggest lake system in New Franklin by far is the Portage Lakes watershed. The Lakes straddle several communities and drain into the Tuscarawas River. The Portage Lakes are an important site for recreation and native species, so it is vital to protect the water quality in this area. Riparian buffers are just one way that communities and individuals can safeguard this fresh water resource.

In addition to the Portage Lakes, the Ohio Department of Natural Resources manages the Portage Lakes Wetland State Nature Preserve. Wetlands are essential for water filtration, flood control, and other environmental benefits, and also benefit from a native plant buffer.



EXISTING RIPARIAN SETBACKS IN NEW FRANKLIN

There are a multitude of riparian setbacks already existing in New Franklin. However, smaller streams, ditches, and even wet areas on your property could benefit from a riparian buffer! Because riparian buffers are sized to the size of the stream that they border, they will bring benefits at any scale.

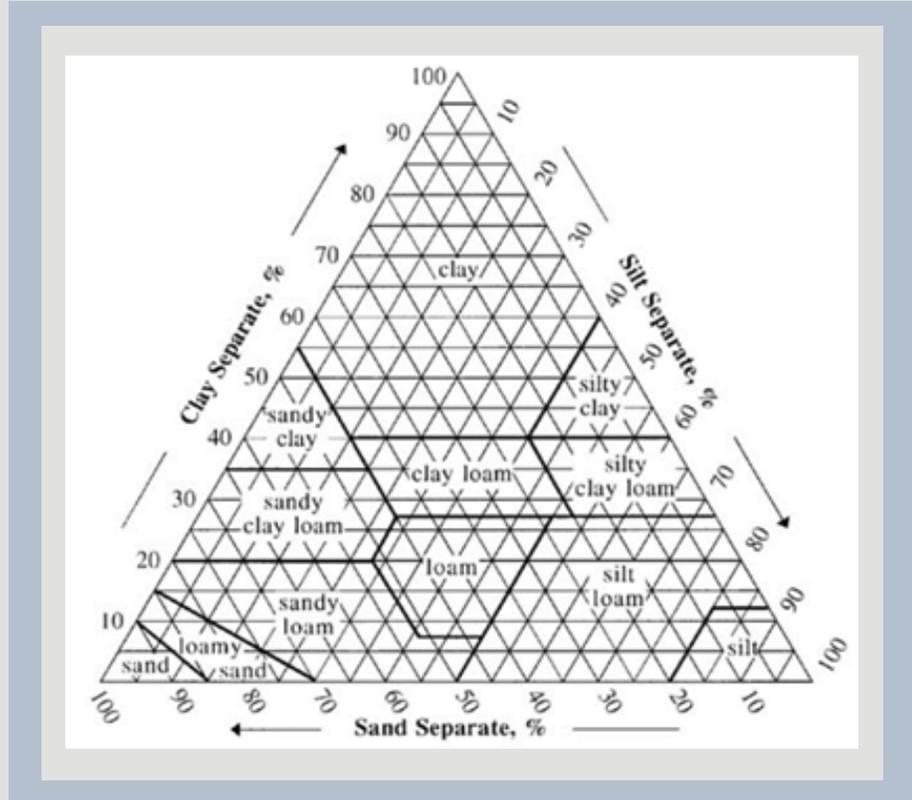
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Soils and Their Interactions

GRAPHICS CREDIT: USDA NATURAL RESOURCES CONSERVATION SERVICE SOILS

WHAT ARE NEW FRANKLIN'S PRIMARY SOIL TYPES?

New Franklin's soils are primarily composed of silt loams. The terms "silt" and "loam" refer to the texture of a soil. Percentages are assigned to soils, and these percentages tell us the ratio of different sized particles found in a soil. Silt loam soils are typically "good" soils for agriculture and are classified as having moderate water availability and the ability to encourage root growth. The chart below has more information that details soil textures. A very small amount of New Franklin's soils are classified as urban land complexes, which refers to the impact of urbanization on soils.

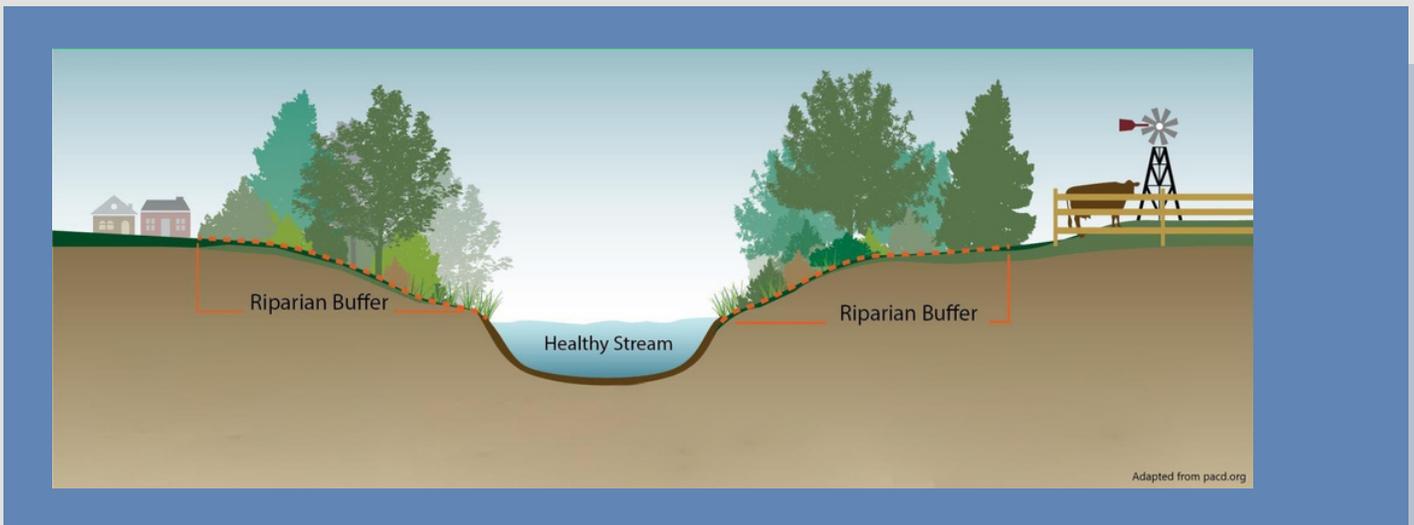


HOW DO SOIL TYPES RELATE TO RIPARIAN MANAGEMENT?

The soils under our feet can tell us a lot about the history of an area. One factor that defines a traditional riparian area is its soil type. These soils are strongly influenced by the presence of water in/along their environment. These soils are often hydric - which means they are periodically and seasonally flooded. The vegetation found in these soils is different than in other areas throughout the Township. These plants have adapted to periods of soil saturation and even thrive in these conditions!

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General Enhancement Information



WHAT DOES “ENHANCING A RIPARIAN ZONE” MEAN?

Enhancing a riparian zone refers to actions that individual property owners can take to improve the riparian setback on their land. Property owners can work with the City and Summit SWCD to assess their site and plan affordable and sustainable management actions.

HOW CAN YOU ENHANCE THE RIPARIAN ZONE ON YOUR PROPERTY?

You can utilize a variety of methods to enhance the riparian zone on your property. The most important action you can take is planting native vegetation in the riparian setback area. Native plants are adapted to your environment and therefore require little maintenance, and they work to: stabilize slopes, thereby mitigating ongoing erosion and preventing future erosion; filtering runoff before it reaches the stream; trapping sediments from erosion outside of the buffer zone; and providing habitat for native birds, insects, and other species.

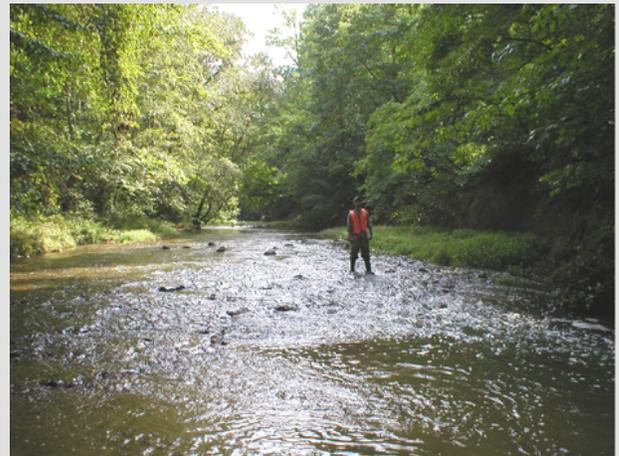
You can remove invasive plant species and replace them with native plants. Summit SWCD has an extensive list of native plants that are suitable for riparian areas and can be purchased locally. [Click here](#) to visit Summit SWCD's website for invasive and native plant resources.

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Violations and Prohibited Actions

WHICH ACTIONS ARE NOT ALLOWED UNDER THIS ORDINANCE?

Certain activities will damage a riparian setback and are therefore prohibited under the ordinance. These activities include new sewage treatment areas, parking lots, construction of new structures, roads, or driveways. Use of motorized vehicles, dredging, or dumping in the riparian setback or the stream are also considered damaging to a riparian buffer and is prohibited under this ordinance. Certain situations involving some of these actions might be allowable, but it is important to consult with the Township and/or Summit SWCD before initiating these actions. Staff from these offices can help property owners to follow the ordinance and avoid any violations.



A "bad riparian" (left) vs. a "good riparian" (right). Notice the presence/absence of vegetation and development activity.

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Water Regulators and Regulations

WHICH AGENCIES REGULATE WATER QUALITY?

Water quality is regulated at various levels of government in the United States. This starts with the federal government, with state governments also having their own water management and water quality regulations. Within each state, some counties, cities, and townships pass rules and regulations to further protect water quality.

At the federal level, the Clean Water Act was passed in 1972 to regulate discharges of pollutants into the waters of the U.S. While the Clean Water Act has been amended over time, its core principles have stayed the same; "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters". This Act is enforced by the Environmental Protection Agency (EPA). Under the Clean Water Act, each state is required to establish water quality standards to protect, maintain, and improve the quality of the waterbodies within their state. The purpose of this rule is to keep rivers, lakes, streams, and other waterbodies both "swimmable" and "fishable". These standards are managed through the National Pollutant Discharge Elimination System (NPDES), which requires municipalities, industries, and other entities to receive a NPDES permit from the Ohio EPA, Division of Surface Water, prior to discharging into surface waters of the State.

At the county level, Summit County enforces standards of the NPDES permit program through a Municipal Separate Storm Sewer System (MS4) management program. The Summit Soil and Water Conservation District works in conjunction with the County to provide guidance, technical assistance, education programs, contracts, and other resources to the cities, villages, and townships under the MS4 program. Additionally, the Summit County Public Health department is responsible for monitoring the quality of both surface water and groundwater as it pertains to public health - i.e. drinking water, disease, etc.

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Water Regulators and Regulations

WHO MANDATES RIPARIAN BUFFERS?

The NPDES permit program for municipal sources (or MS4s) is divided into two program areas, Phase I and Phase II. Both phases focus on stormwater and other sources of non-point source pollution within a MS4 community. The NPDES Phase II lists several projects that communities can undertake to educate residents about stormwater management. These projects engage residents in direct action to protect water quality and reduce the negative impacts of stormwater pollution both on their properties and throughout their community.

Riparian buffers are one implementation strategy supported by the EPA's NPDES program. Copley Township passed the riparian buffer ordinance to protect and preserve water quality in accordance with the EPA and to engage Township residents in this task. The riparian ordinance aides to protect the health, safety, and welfare of Copley Township residents by controlling uses and developments within the riparian setback that would otherwise impair the ability of the riparian area to:

1. Reduce flood impacts by absorbing peak flows, slowing the velocity of floodwaters, and regulating base flow.
2. Stabilize the banks of streams to reduce bank erosion and the downstream transport of sediments eroded from stream banks.
3. Reduce pollutants in streams during periods of high flows by filtering, settling, and transforming pollutants already present in streams.
4. Reduce pollutants in streams during periods of high flows by filtering, settling, and transforming pollutants in runoff before they enter streams.
5. Provide areas for natural meandering and lateral movement of stream channels.
6. Reduce the presence of aquatic nuisance species to maintain diverse and connected riparian vegetation.
7. Provide high quality stream habitats with shade and food to a wide array of wildlife by maintaining diverse and connected riparian vegetation.
8. Benefit Copley Township economically by minimizing encroachment on stream channels and reducing the need for costly engineering solutions such as dams and riprap, to protect structures and reduce property damage.
9. Contribute to the scenic beauty and to the environment of Copley Township, increasing both the quality of life of the residents of Copley Township and corresponding property values.

Remember, everyone lives in a watershed, and everyone has the potential to make a positive impact on the water quality and environment around them. Contact the Summit Soil and Water Conservation District or Copley Township for information on how you can make a positive impact in your watershed!

Reader Resources

MAPS

WATERSHED MAPS

[GEOGRAPHIC INFORMATION SCIENCE \(GIS\) WATERSHED LOCATOR](#)

[SUMMIT COUNTY GIS DATABASE](#)

SOIL MAPS

[NRCS WEB SOIL SURVEY](#)

[GLOBAL SOIL REGIONS MAP](#)

OTHER MAPS

[CITY OF NEW FRANKLIN MAPS](#)

NATIVE PLANT RESOURCES

NATIVE PLANT GUIDES

[LANDSCAPING WITH NATIVE PLANTS](#)

[MORE LIFE WITH LESS LAWN](#)

[WOODS FOR WATERS - RIPARIAN PLANTING GUIDE](#)

[RAINGARDENS FOR HOMEOWNERS](#)

[NATIVE PLANT SOCIETY OF NORTHEAST OHIO](#)

[NATIVE PLANT FINDER](#)

WHERE TO BUY

LOCAL SOIL AND WATER

CONSERVATION DISTRICT PLANT SALES

[OHIO PRAIRIE NURSERY](#)

[ERNST SEEDS](#)