

Wetlands:

NATURE'S FLOOD PROTECTION SYSTEM

Healthy wetlands support clean water, wildlife habitat, and resilient communities throughout Tinker's Creek and Brandywine Creek watersheds and the larger Lake Erie watershed.

WHY WETLANDS MATTER

Urban Runoff: In developed areas, rain falls on hard (or impervious) surfaces - like roads, parking lots, and roofs - and runs off into storm drains and streams, carrying oil, lawn fertilizer, and other pollution directly into the branches of Tinker's Creek and Brandywine Creek.

Natural Filters: Wetlands situated along these major drainage pathways serve as crucial natural filters. They act as natural sponges by storing water, slowing it down, and allowing it to soak into the ground, where plants can help filter out harmful pollutants.

Flood Reduction: Intense storm cycles can trigger high water levels. Floodplain wetlands function as massive geographical overflow valves, allowing water space to pool safely, reducing downstream rushing volumes, stabilizing local stream banks, and protecting residential infrastructure from backpressure.

Protecting remaining wetlands is one of the most cost-effective ways to improve watershed health and community resilience, saving taxpayers millions of dollars in municipal stormwater infrastructure upgrades and repairs.

Wetlands are among the most valuable ecosystems on Earth, providing benefits for both people and wildlife.



FLOOD REDUCTION

Wetlands absorb and store stormwater, releasing it slowly to reduce flooding and erosion.



CLEANER WATER

Wetlands filter sediment, nutrients, and pollution before they enter streams, rivers, and lakes.



WILDLIFE HABITAT

Wetlands provide food, shelter and breeding areas for birds, amphibians, fish, pollinators, and more.



EROSION CONTROL

Wetland vegetation stabilizes soil and shorelines, reducing erosion and protecting waterways.



CARBON STORAGE

Wetlands store carbon in plants and soils, helping reduce greenhouse gases in our atmosphere.

BY THE NUMBERS

90%

of Ohio's original wetlands have been lost or degraded.

(Ohio EPA, 2024)

951

distinct wetlands actively filter water and control floods across the Tinker's Creek basin.

(Ohio EPA, 2021)

580,000

estimated gallons of rushing stormwater trapped and cleaned annually by regional wetland restorations.

(Ohio EPA, 2021)

42%

surge in the amount of heavy rainfall dumped during our worst downpours, increasing local flood risks.

(USGCRP, 2018)

5 BILLION

gallons of stormwater runoff stored & filtered **yearly** by natural wetlands in Tinker's Creek basin.

(Ohio EPA, 2021)

HOW YOU CAN HELP

Everyone can play a role in protecting wetlands!



PLANT NATIVE

Native plants help absorb and filter rainwater, prevent erosion, and support local wildlife



REDUCE RUNOFF

Limit impervious surfaces, use rain barrels, plant a rain garden, and keep leaves out of storm drains.



GET INVOLVED

Participate in local cleanups, tree plantings, and other volunteer events. Learn more at www.tinkerscreek.org/events



PROTECT WATER

Eliminate chemical fertilizers and pesticides on lawns to stop toxic agricultural runoff & use eco-friendly household cleaners to prevent toxic chemicals from washing into our watersheds.



LEARN MORE

Stay informed and share what you learn with others!



Help Keep Our Creeks Clean

Healthy wetlands & streams depend on neighbors like you. If you notice unusually muddy water pouring from construction zones, strong chemical odors, or trash piling up in local ravines, you can help by:

- **Spot it. Nominate it. Restore it.** - Visit <https://tinkerscreek.org/contact-us/> to submit a trash-heavy stream site for a future community cleanup day.
- **"Adopt-A-Stream" Cleanup Kit** - Round up your friends and family and borrow our stream cleanup kit <https://tinkerscreek.org/get-involved/>

References

Ohio Environmental Protection Agency. (2024). Final report volume 2 (Report No. M928). Division of Surface Water.

Ohio Environmental Protection Agency. (2021). Nine-element nonpoint source implementation strategic plan (NPS-IS plan): Tinker's Creek headwaters HUC-12 (Version 1.1). Ohio EPA Division of Surface Water.

U.S. Global Change Research Program. (2018). Fourth national climate assessment: Volume II: Impacts, risks, and adaptation in the United States (Report No. NCA4). U.S. Government Publishing Office.