



Save Maumee Grassroots Organization Riparian Buffer Initiative

Protecting desirable trees next to ditches and making streams healthy!

Our three project areas are **within the most critical areas** of the Upper Maumee River. **Bullerman Ditch, Six-Mile Creek and Trier Ditch** remain on the federal 303 (d) list of **impaired waterways**, as reported by IDEM.

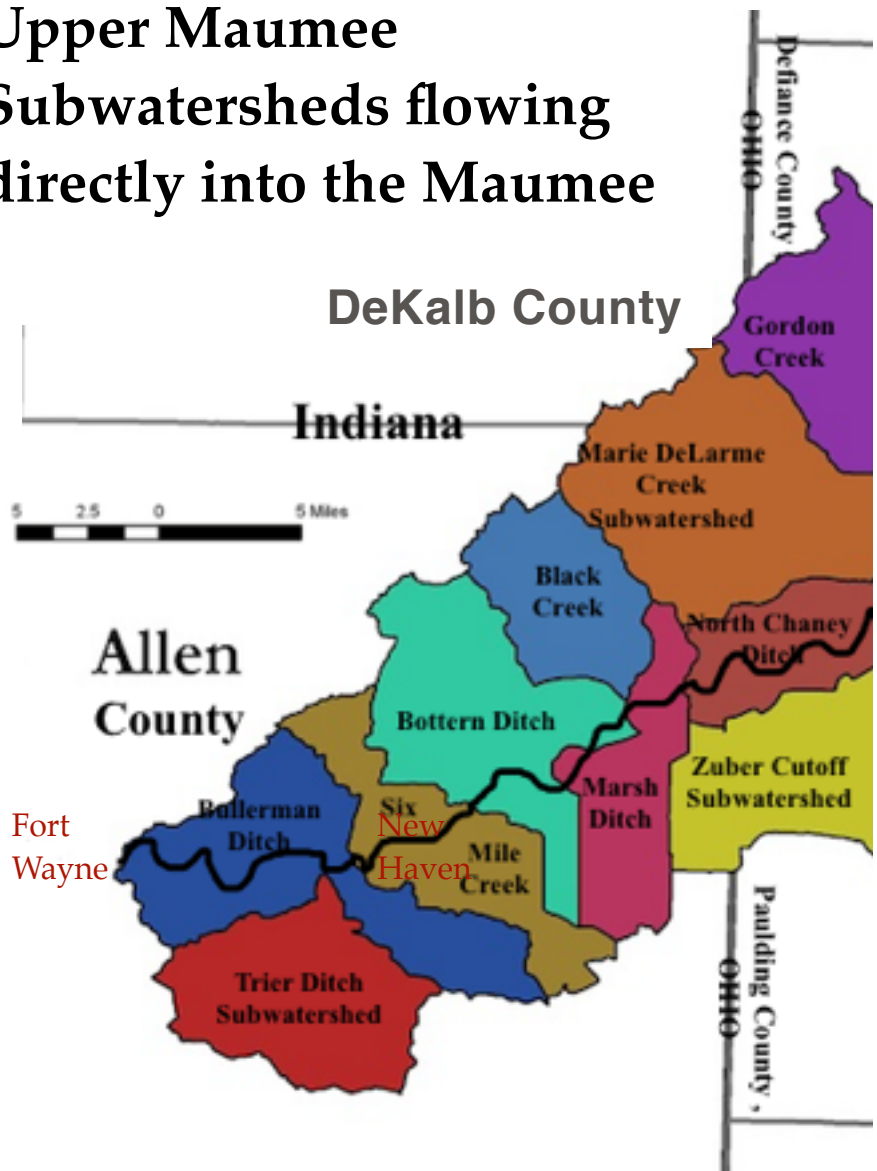
You are part of the solution.

Our locations for the *Riparian Buffer Initiative* are on “violent” streams that are *flashy*. The water will rise quickly when it rains and then drop quickly to average stream-height after a few days. When the water rises and the trees are able to withstand the streams’ velocity, it shows our restoration efforts are working.

Our reforestation efforts are looking for you to **help protect native species of trees and plants that lie next to perennial streams** .. and remove only the invasives!

Research for *Save Maumee’s Riparian Buffer Initiative* was conducted in cooperation with the USDA Forest Service through Great Lakes Restoration Initiative (GLRI) federal funding.

Upper Maumee Subwatersheds flowing directly into the Maumee

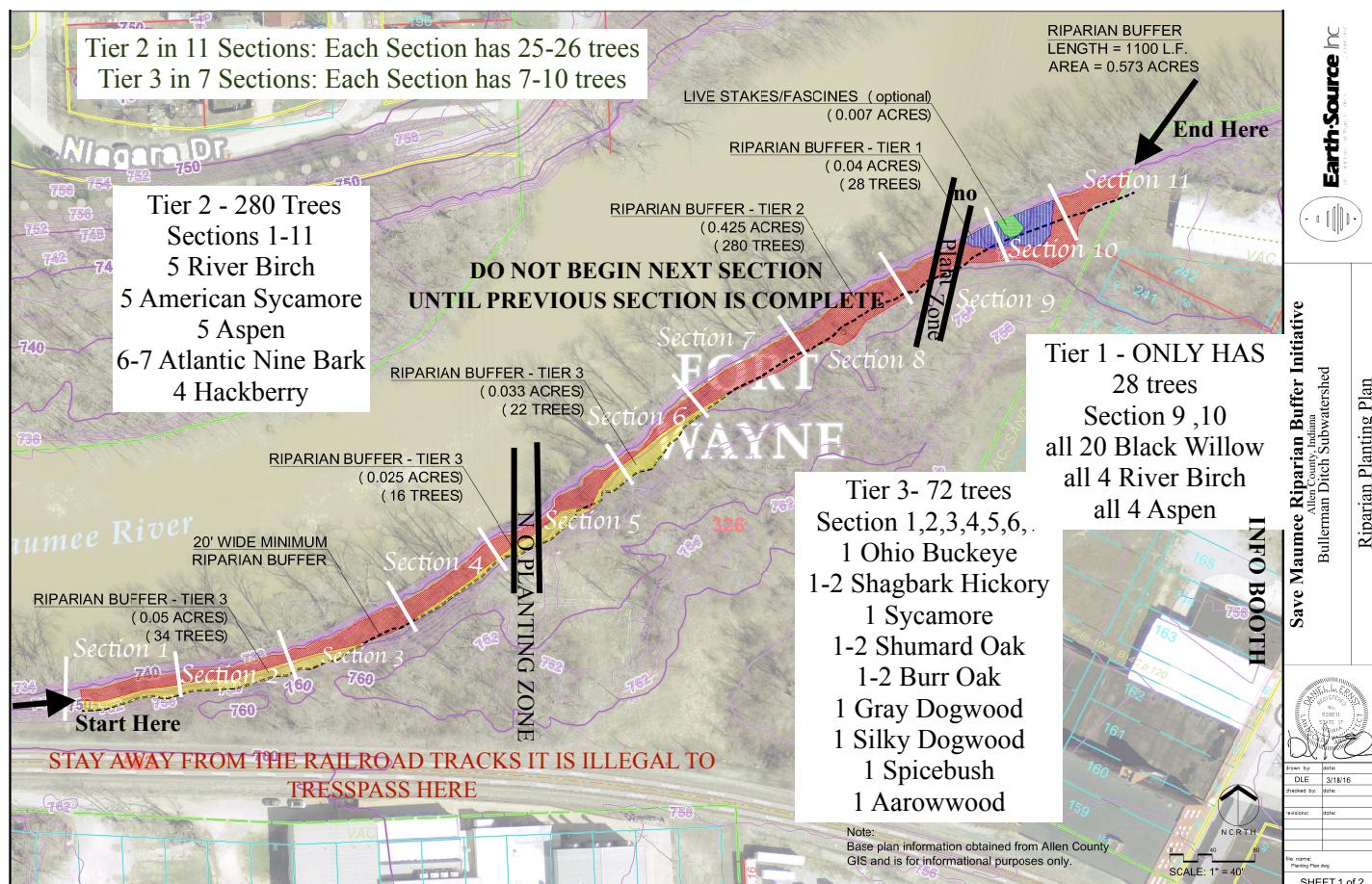


Grant recipients of the USDA Forest Service have responsibilities to conduct their programs according to USDA’s nondiscrimination policy. Save Maumee and the USDA are equal opportunity providers, employers, and lenders.



April 17, 2016 installation COMPLETE
Bullerman Ditch Subwatershed Project Area
380 Trees installed, including 13 tree species

Installed over 1,000 linear feet of riparian buffer, with a width no less than 25 feet, yielding approximately .573 acre of added forest along one of the (three) most critical areas of the Upper Maumee River's sub-watersheds, due to **lack of riparian buffers**, urban land-use, CSO's and septic tank failures.



- These added 380 trees will capture 22,440 gallons of water / year to reduce flooding elsewhere
 - Sediment load reduction to yield 190 tons of soil retained / year
 - Nitrogen load reduction to yield 320 pounds / year
 - Phosphorus load reduction to yield 320 pounds / year
 - Over 700 volunteer hours were logged, by over 268 volunteers for this site
- *Preparation of site included removal of over 800 Asian Honeysuckle bushes



Plant Six-Mile Creek Subwatershed 2016

JOIN US AT THIS SITE

460 trees on location: 10930 Stellhorn Rd. New Haven, IN 46774

We need you to help us to install 1,200 linear feet of riparian buffer, with a width no less than 25 feet, yielding approximately .68 acre of added forest along one of the (three) most degraded sub-watersheds to the Upper Maumee River. This is a priority area due to **lack of riverbank buffers**, urban land-use, impaired biotic communities, PCB's, CSO's, septic tank failures, DRP, sediment and exceeding Total Suspended Solids 100% of the time. *TSS is soil and all pollutants carried with that sediment.



3 Days of Tree Planting

Friday Oct. 21
NOON-5pm
&
Saturday Oct. 22
NOON-5pm
&
Sunday Oct. 23
NOON-3pm

ALL EVENTS ARE RAIN OR SHINE

To date, 31 people have logged 100 volunteer hours, by removing over 1,000 Asian Honeysuckle bushes, to prepare this site for planting trees in October.

September 9, 2016

- Adding 460 trees will capture 27,140 gallons of water / year to reduce flooding elsewhere
- Sediment load reduction to yield 216 tons of soil retained / year
- Nitrogen load reduction to yield 384 pounds / year
- Phosphorus load reduction to yield 228 pounds / year
- Gain resident volunteer participation in reforestation efforts

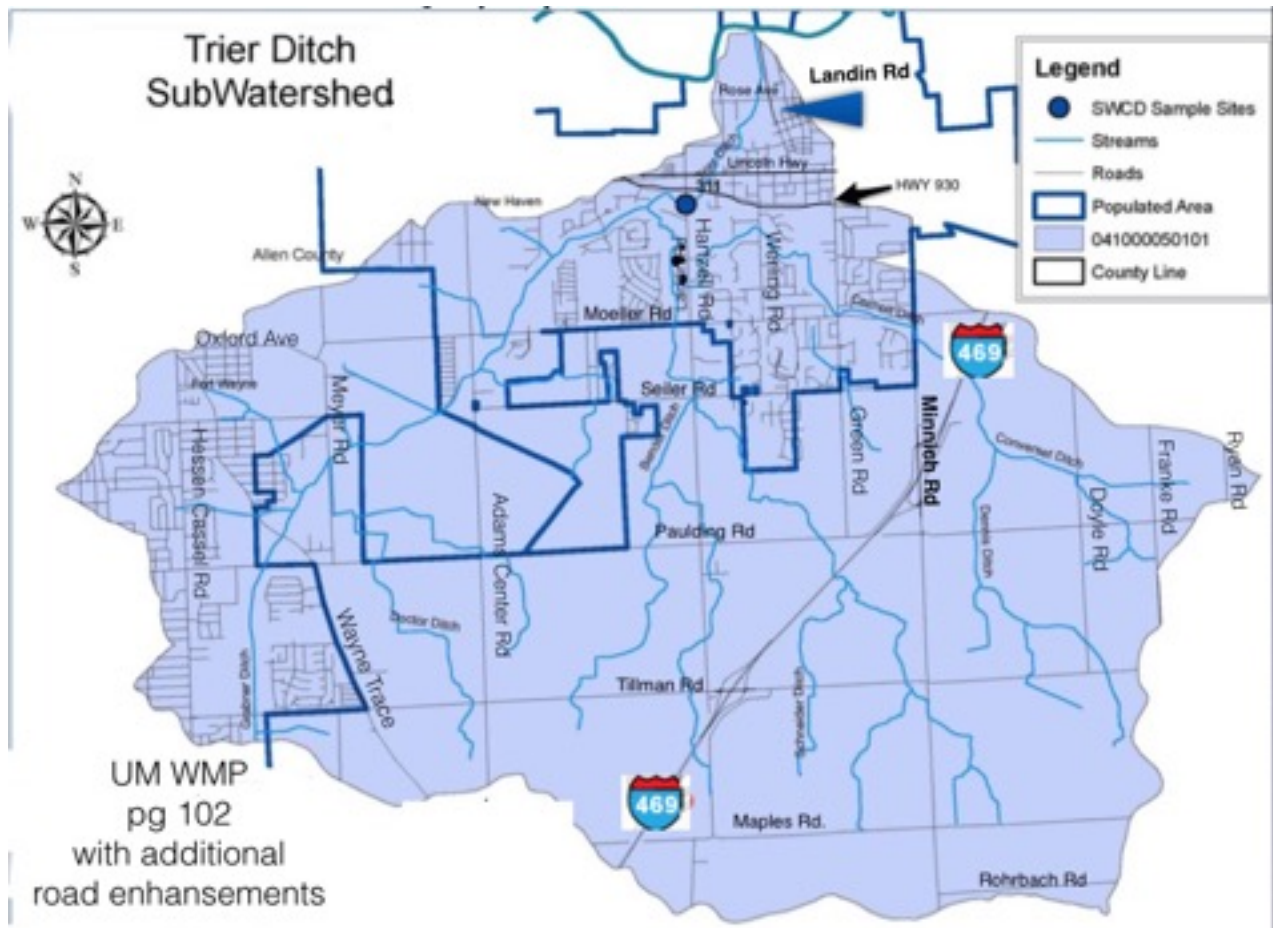
Currently Seeking our Largest Area for Restoration

scheduled for planting at Save Maumee's 12th Annual Earth Day on April 22, 2017

Trier Ditch Subwatershed

550 Trees to be planted for this project

Planning to install over 1,400 linear feet of riparian buffer, with a width no less than 20 feet, will yield approximately .8 acre of additional forest. Degraded status: Priority 1 due to **lack of riparian buffers**, urban land-use, CSO's, septic tank failures, Dissolved Reactive Phosphorus (DRP) and sediment.

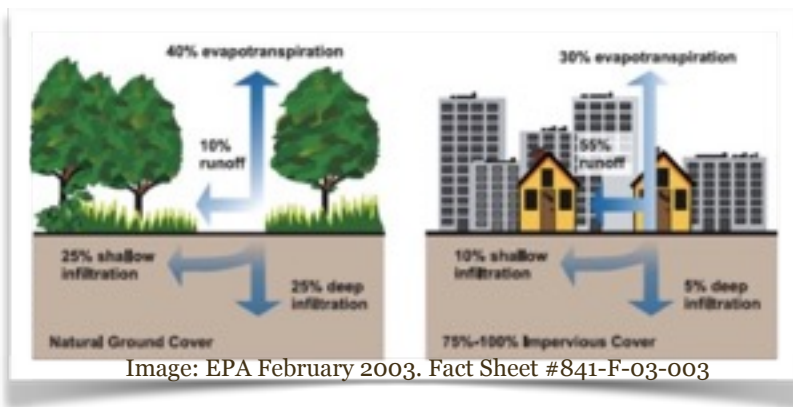


- Adding 550 trees would capture 32,450 gallons of water / year to reduce flooding elsewhere
- Sediment load reduction to yield 253.43 tons of soil retained / year
- Nitrogen load reduction to yield 426.66 pounds / year
- Phosphorus load reduction to yield 253.32 pounds / year
- Gain resident volunteer participation in reforestation efforts

How Trees and Plants Help to Improve Water Quality

Vegetation

- holds soil in place during rain and flooding so it does not float down the river or stream
- slows water down, by filtering it deep into the soil through the roots, naturally eliminating runoff, retaining the water for a longer period of time, so the sediment / silt settles instead of eroding and causing sedimentation
- absorbs fertilizers and waste materials, removing excess nitrogen, nutrients, phosphorous, organic waste and toxins
- produce enzymes which break down toxic chemicals and also “eat” bacteria; improving water quality by using or retaining nutrients before it passes downstream which cause excessive algae blooms and bacterial growth
- alleviates flooding since vegetation & trees capture, store and slowly release water, all while slowing destructive energy from fast moving, rising water, protecting stream banks and shore lines
- recharges groundwater, potentially reducing water shortages during dry spells
- reduces pools of standing, stagnant water that create breeding grounds for mosquitos to carry disease and viruses to humans
- creates habitat for wildlife, providing food, breeding grounds and resting areas
- increases opportunities for recreation equating to economic dollars—bird watching, waterfowl hunting, fishing, photography—and outdoor education



Mowing these areas would be inappropriate. Native plants are adapted to climate & soil, while the animals in the region are adapted to those plants; Natives meaning previous to European decent.

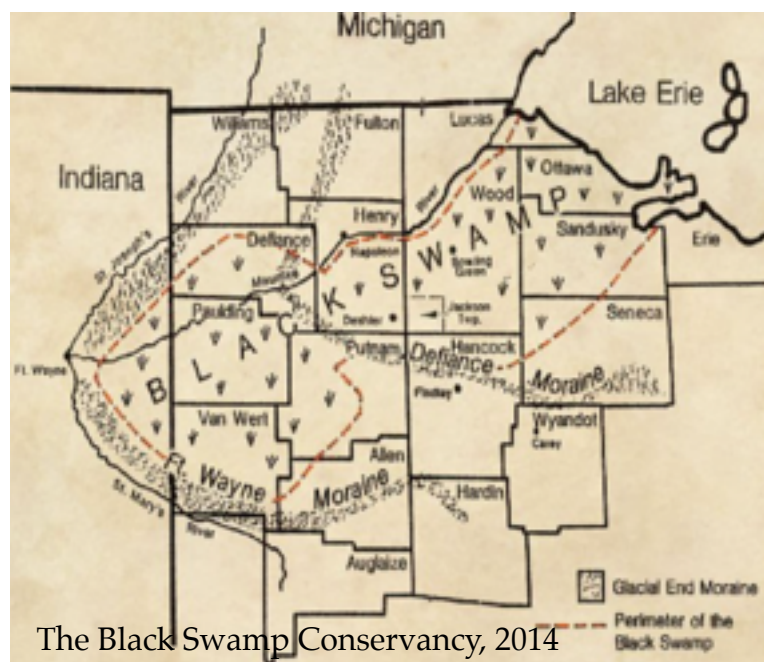
SEDIMENTATION remains the #1 pollutant in *surface waters* (i.e. rivers, tributaries, streams).

The Great Lakes Restoration Initiative (GLRI)

Since 2010, GLRI programs have helped fund projects that are targeted to improve some of the most degraded tributaries in the Great Lakes watersheds. The Western Lake Erie Basin has been identified as an Area Of Concern (AOC). From removing invasive species, reducing nutrient and sediment runoff, and restoring native species ~ the initiative has provided resources in several states in the Great Lakes Region, including Indiana.

In February of 2016, SMGO traveled to Washington D.C. to lobby our legislators to continue to fund GLRI projects that are continuing to make a positive impact on the Great Lakes Ecosystems. One of these projects is the Save Maumee Riparian Buffer Initiative, which has been funded by the United States Department of Agriculture's Forest Service.

The Save Maumee Riparian Buffer Initiative is working to increase the quality of three of the most degraded subwatersheds in the Western Lake Erie Basin: Bullerman Ditch (April 2016) and Trier Ditch & Sixmile Creek from 2016-2017. The plan includes removing invasive species (such as Asian Honeysuckle), reducing non-point source pollution through the use of riparian buffer plantings (trees, shrubs, and perennial seeding), and restoring native species and ecosystems in the watershed through the use of plantings. We are working to implement the Upper Maumee Watershed Management Plan to increase necessary vegetation along rivers and streams.



The Great Black Swamp mirrors the Maumee Basin

Allen County, Indiana is not considered a priority area in the Indiana Statewide Forest Strategy, that would "restore and connect forests, especially in riparian areas." The land in Allen County is 8% forest, but an increase in forested area through the implementation of riparian buffers would provide much-needed wildlife habitat and increase the surface water health of the tributaries. These restoration practices will increase the health of the Maumee River and its shared waters.

Save Maumee's purpose is to preserve, protect and improve the ecosystems of the Upper Maumee River and watershed by increasing public awareness through advocacy, collaboration, education and hands-on projects. Save Maumee is a charitable, nonprofit organization recognized as a 501(c)(3).

"Most of the forested corridor around the rivers have been removed."
- Plan-It Allen, Allen County's Comprehensive Plan 2007

Riparian Buffer Zones

Tier 1 - Stream Side Zone - This is the closest zone to the stream. The trees and other types of plants physically protect the stream from runoff & erosion, and provide shade to the cool the water keeping it rich in dissolved oxygen (DO). A mature wooded forest and dense shrubs are preferred to hold the soil together and provide suitable habitat for fish.

Tier 2 - Middle Zone - This is the zone that filters, slows down and absorbs runoff before it enters the stream. Wetlands or wooded forest capture and store sediment, nutrients and other pollutants.

Tier 3 - Outer Zone - This is the "buffer" of the buffer. It is the farthest zone from the stream and the closest to roads, farmland and towns. Trees, shrubs and even grass will absorb and filter surface runoff into the soil.

Save Maumee is working to increase necessary vegetation along rivers and streams, which will increase the health of the Maumee River and its shared waters, while providing many attributes, like filtering out a significant portion of potentially harmful pollutants. The term **riparian** applies to any land surrounding or abutting surface waters.

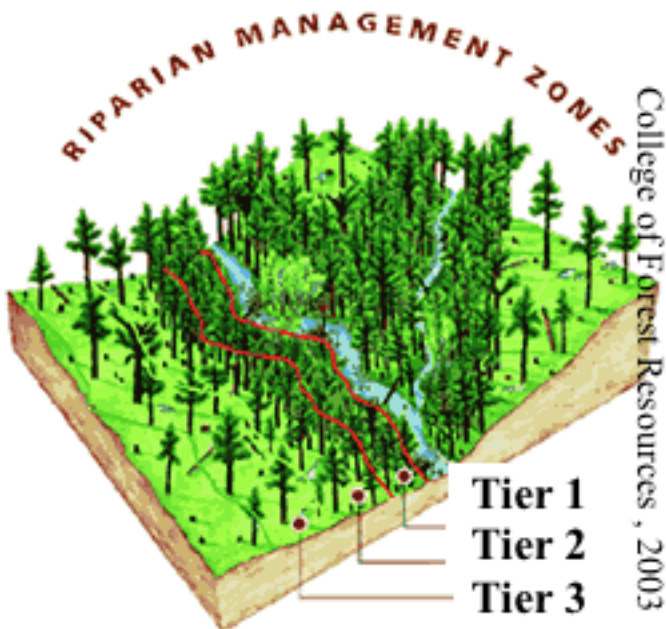
Current reasons why trees are being removed:

- ❖ **Allen County Drainage Board's voting members = Allen County Commissioners** - approve indiscriminate removal of ALL vegetation on both sides of ditches for "maintenance"
- ❖ **Timber Value** - hardwood trees are a commodity to be bought and sold at high value
- ❖ **Development** - trees are cleared and replaced with concrete and rooftops
- ❖ **Disease** - due to the Emerald Ash Borer, 24% of Fort Wayne's tree canopy is slated for removal
- ❖ **Invasive Species** - compete with native trees and plants for water, space, sunlight and soil nutrients and will change the face of our landscape if not eradicated.

- ❖ **Energy Easements & Eminent Domain** - "Trees pose a potential threat to power lines and are to be removed." - AEP 2011

❖ **Levees** - "vegetation must be removed 15 feet on either side of all levees." - ACE

❖ **Wildlife** - beavers and deer no longer have wild grazing areas, so they feast on young trees wherever habitat can be found.



Who supports trees and plants next to waterways?

Environmental Protection Agency, USDA Forest Service, National Resources Conservation Service, Division of Forestry, Indiana Department of Environmental Management, Ohio EPA, Maumee River Basin Commission, Purdue Extension Office, Watershed Leadership Academy, Citizens Action Coalition, Sierra Club, Plan-It Allen, Upper Maumee Watershed Management Plan and corresponding watershed management plans and peer reviewed research.

Assure current practices of the Allen County Commissioners, who are the voting members of the Allen County Drainage Board, DO NOT conflict with stream health, protection and revitalization.

There should be a greater emphasis on creating partnerships and providing incentives that will encourage best management practices, that can produce desirable results at all levels

- STOP approving variance to current laws** which protect wetlands, floodways and floodplains. The recommendations of IDEM are set in place for protection of water quality. It is the Drainage Board's job to protect their constituents' investments & homes from future flooding.
- STOP approving waivers for public hearing notifications and requirements.** Do not negate the process that allows complete research and public input for long term solutions.
- STOP removing both sides of the vegetation along ditches and streams.** Removal of vegetation adjacent to streams should only be on one side. "Impacts the riparian habitat where excavation is occurring and will normally require **some degree of mitigation.**" -Indiana Drainage Handbook, 1999.
- **STOP approving septic tanks in unsuitable soils.**
- STOP approving high-water use development** that taps into already full sewers. We cannot handle current loads of stormwater & sanitary sewers, much less adding more drainage to an already full system that cannot handle any more water until the year 2025.
- PLEASE assure protective and legally required stormwater practices are in place** by assessing construction **after** it "breaks ground," to assure water health.

The County has been telling citizens that trees are being removed on both sides of ditches for "maintenance." Citizens say the water in their ditch does not reach the top of the streambank, but water is flooding their basement. This means **the groundwater is saturating the ground where permits were allowed to build these homes and businesses.** The sediment and volume of water in the ditch is not causing homes to flood, it is caused by previous poor County planning.

Adding more concrete slows percolation and adds more water quantity and velocity to streams. Removing native species, filling wetlands, building in flood planes and draining land with tiles is directly related to declining water quality.

Demand transparency and accountability of public officials whose job is to protect public health. Attend the next Allen County Drainage Board Meeting, every 4th Thursday of the month. 9:30AM - Council Courtroom at Citizen's Square in Suite 035, to improve current practices.

UPCOMING EVENTS



<http://savemaumee.org/all-upcoming-events/>

SATURDAY OCTOBER 15, 2016

9th Annual Seed Harvest NOON-4pm

DONT GO TO THE RED BARN THIS YEAR

PARK HERE: 8315 W. Jefferson Blvd. Fort Wayne, IN 46804

AKA: Olde Canal Place - Boy Scouts of America Parking Lot

Harvesting in Eagle Marsh



3 DAY OCTOBER 2016 TREE PLANTING

Friday Oct. 21, NOON-5pm

Saturday Oct. 22, NOON-5pm

Sunday Oct. 23, NOON-3pm

We will be planting 460 trees in Six Mile Creek at the site,

LOCATION: 10930 Stellhorn Road, New Haven, IN 46774

(just southeast of Korte Does-it-All)

~ Save Maumee Annual Member Meeting ~

Monday November 7th 7-8:30pm Don Hall's Gas House

Members Only, but you can purchase your annual membership this evening!

~Save Maumee Public Monday Monthly Meeting 1st Monday of Every Month~

7-8:30pm at Don Hall's Gas House ~ Monday October 3, November 7, December 5

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