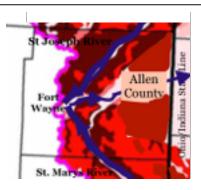
ALL 3 RIVERS IN FORT
WAYNE / ALLEN
COUNTY REMAIN ON
THE 303 (D) LIST OF
IMPAIRED WATERWAYS
BECAUSE
THEY FAIL TO COMPLY
WITH FEDERAL WATER
QUALITY STANDARDS





WATER QUALITY
SHOULD BE
CONSIDERED
BEFORE ALL ELSE



SAVE MAUMEE GRASSROOTS ORGANIZATION INC.

SAVEMAUMEE.ORG

WATER QUALITY ISSUES & CORRESPONDING NON-POINT SOURCE SOLUTIONS

Review the process' of Allen County:

These Allen County agencies do not appear to support conservation practices recognized by

IDEM, EPA, NRCS, Division of Forestry, Maumee River Basin Commission, Plan-It Allen, and corresponding watershed management plans & peer reviewed research.

Allen County Commissioners also fill the role of the Drainage Board, Board of Zoning Appeals, etc. The process of reviewing and approving drainage proposals and approving additional drainage needs, should be reviewed immediately.

- * indiscriminate removal of native vegetation adjacent to streams to "dip" ditches
- * approving new-build & high-water use development that taps into already full sewers
- * approving septic tanks in unsuitable soils
- * application of manure on frozen ground
- $\mbox{\ensuremath{^{*}}}$ variances for construction or added fill-dirt in floodplains & wetlands

- **☑** Board of Commissioners
- **Total** Drainage Board
- **I** Board of Zoning Appeals
- **☑** Redevelopment Commission
- **☑** Plan Commission / Dept. of Planning Services
- Building Department Board
- Soil & Water Conservation
 District

* assess construction (after approval) to assure protective & required stormwater practices are in place

Combined Sewer infrastructure is one additional problem plaguing drainage that has reached epic proportions. The Federal EPA is now mandating Fort Wayne's Long Term Control Plan. Reducing illicit discharges (over 71 times/year) to appropriate frequency (4 times/year) is not expected until the year 2027. We cannot handle current load of stormwater & sanitary sewers, much less adding more drainage to an already full system.

Allen County, Indiana

= 429,440 total acres of land (671 square miles)

- * 53% of those acres are crop fields
- * 2.9% of those acres are wetlands
- * 85% of wetlands have been lost since the 1700's (Jane R. Frankenberger, Purdue Extension Agricultural Engineer, 2015)
- *14.7% of those acres are single family-residential (Allen County Indiana's Comprehensive Plan, Plan-It Allen)

this land eventually drains into the Maumee River via the St. Joseph & St. Mary's Rivers

The Maumee River crosses all the political boundaries: City of Fort Wayne, Allen County & State of Indiana

Upper Maumee River
Watershed
Management Plan
(UM WMP) suggests
best management
practices to protect
rivers & streams &
adjacent vegetation!







Instead of proper bioretention - these convex impervious areas do not capture water & utilize the runoff, they

create runoff.







Who "owns" this stream or ditch? Does the water flow through it most of the year?

Yes

Almost all ditches in Allen County are owned by Allen County...

...however the landowner is responsible for the maintenance of "their" ditch.

The landowner who uses this ditch to drain their land (even residential) pays a "drainage fee" that funnels into the Allen County Drainage Board.

The Allen County Drainage Board, through an ambiguous process, decides which ditches are to be "dipped".

Indiana Dept. of Environmental Management (IDEM) remains the only enforcement agency and remains underfunded.

Save Maumee wants to assure this process does not conflict with natural streambank protection & revitalization and consider using alternative approved practices to remove invasive species & protect the buffer areas.

Save Maumee supports:

- * Preservation of wetlands & riparian areas next to rivers & streams
- * Best Management Practices
- * Fair-market-value purchase of homes & businesses in floodways
- * Revegetation on both sides of streams & ditches ideally 20-75 ft
- * Citizen Participation

If the riparian area is receded, it needs to be reseeded!

What does it mean to "dip a ditch"?

Common Practice is to chemically remove vegetation with an herbicide, then excavate the remaining trees with heavy equipment to easily remove sediment from the bottom of the ditch. According to the Indiana Drainage Handbook, there are many ways to excavate/dredge:

to increase the capacity of a natural stream or regulated ditch. Over-bank excavation involves the least amount of disturbance to the channel and the natural habitat associated with it. However, it sometimes impacts the riparian habitat where excavation is occurring and will normally require some degree of mitigation.

Save Maumee wants to assure that common practice adapts to best management practices identified in the Upper Maumee Watershed Management Plan and drainage practices allow for some degree of mitigation. These best management practices need to be incorporated, not ignored.

The word *ditch* needs a perception change: **Instead use the word stream!** Ditch is derogatory!

- * A *ditch* insinuates the water is to be gotten rid of, & doesn't go anywhere, so it is a place to drain dirty water!
- * The politically correct term is stream!

Even the Army Corps of Engineers (ACE) is aware of the value of vegetation adjacent to streams and is working to reverse the policy of indiscriminate removal of vegetation on levees through H.R. 3080: Water Resources Reform and Development Act of 2014, changing ACE's "Guidelines for landscape planting and vegetation management at levees, floodwalls, embankment dams and appurtenant structures." (ETL 1110-2-571)

HOW DOES NATIVE VEGETATION HELP TO IMPROVE WATER QUALITY?

PLANTS & TREES

- * hold soil in place during rain and flooding events so "good" soil does not float away. Instead of causing erosion & sedimentation, vegetation slows down the velocity of the water, settling out & capturing sediment & silt.
- * roots, filter strips & buffer strips stabilize stream banks, keeping excess sediment out of the water by protecting rivers & streams from land-use disturbances
- * alleviates flooding, while slowing the destructive energy from fast moving, rising water which protects stream banks & shorelines, since vegetation capture, store and slowly release water.
- * naturally & effectively absorbs nutrients, fertilizers and waste materials, removing excess nutrients; phosphorous & toxins
- * reduces imperviousness to absorb runoff naturally, filtering it deep into the soil through the roots, eliminating runoff
- * produce enzymes which break down toxic chemicals & "eat" bacteria; improving water quality by using or retaining nutrients before passing downstream, which cause excessive nutrients in the water leading to algae blooms and bacterial growth.
- * recharge groundwater, potentially reducing water shortages during dry spells
- * increase opportunities for recreation equating to economic dollars bird watching, waterfowl hunting, fishing, photography, outdoor education because it creates habitat for wildlife: providing food, breeding grounds & resting areas

Look to streams' water quality to improve overall watershed health, because land-use is directly related to stream health and corresponding river health.

SEDIMENTATION REMAINS THE #1 POLLUTANT IN SURFACE WATER (rivers, tribs, streams)

Removing or mowing vegetation next to rivers and streams would be inappropriate. Native plants are adapted to climate & soil, while the animals in the region are adapted to these plants. Natives meaning previous to European Decent.

Allen County Ditch Characteristics

- * siltation
- * high fluctuation (flashy)
- * low oxygen content
- * high water temperature
- * nutrients & pollutants from surface runoff & tile drainage
- * limited variety of plant & animal species

City Utilities are accountable to the public they serve, not County

The higher the rate of surface water contamination from pollutants like nitrates, the higher the cost for treatment. Both Fort Wayne and Des Moines intake raw water from local rivers then treat and distribute drinking water to the local populous. These municipalities are dependent upon surface water. The streams have been directly affected by the shared water that originates upstream in the watershed, and now drinking water is being directly and negatively affected. The rate-paying citizens depend upon their public utility to provide safe, clean, affordable drinking water. If the cost of treatment goes up, the cost to the victimized rate-payer increases.

Fertilizer not taken up by plants, runs-off into surface water or seeps into the ground. If the nutrients soak into the ground they are readily drained by underground tiles and quickly transported to surface water. Even though nitrates are naturally occurring ions that are part of the nitrogen cycle, the public water filtration systems are overloaded with nutrients from fertilizers, septic systems, and manure storage or manure spreading operations. In both Indiana and Iowa the drainage tiles that lie several feet below the surface are carrying the nitrates quickly to rivers and streams.

The discharges from the county districts are now easily identified as a result of current watershed management plans, water sampling and scientific research. These areas should no longer be allowed to blame it on non-point source, as we are now able to identify where they are coming from. It is now time for precedent-setting that can explain how drainage tiles are really underground conduits that carry heavy loads of nitrate that outlets into streams.

If nitrates are becoming a threat because they exceed federal drinking water limits to public health, then it is the duty of the public utility to conquer that threat. If legislative and executive branches of Iowa government have failed to deliver, it is then at the hand of local government to step-in. Chemical fertilizers distributed throughout the watershed on a industrial grade scale are ending up in our surface water! Threats of losing farm conventions and ag. shows in Des Moines Iowa should be no comparison to infant health complications due to high nitrate levels. It would be interesting to compare the true costs associated with infant illness verses State gross income.

Sac County drainage district attorney Colin McCullough says that County drainage districts have no legal authority to collect money for investments other than improving drainage. Our own County's elected officials (Commissioners, Surveyor, Plan Commission, Board of Zoning Appeals) are to regulate drainage districts, yet appears to allow variances because it is in the best interest of County dollar income. One example would be approving septics to placed in soils that are unsuitable. Now is not the time to acknowledge progress, do not blind yourself to the fact that current voluntary conservation practices are not working. A lawsuit may be costly and burdensome, but that is what happens when state and federal leaders lacked the political muscle to reduce nitrogen and phosphorus.

The proof has been shown, "nitrate levels measuring as much as four times above the federal limit for drinking water." Total Maximum Daily Loads (TMDL's), wetland restoration, and buffer and filter strip planning should help to set specific goals and timetables for water quality standards and improvements. Simply, if meaningful voluntary conservation is not working, then regulation is necessary. Iowa secretary of agriculture Bill Northey said it best, "the challenge has always been how to we make the most progress on this important issue in the timeliest manner." This lawsuit may be what it takes.

The Clean Water Act was passed to protect our water from polluters over forty years ago. It is time that a polluter, rather than a taxpayer would actually offset the associated cost. Liability should fall on those that are truly liable for polluting, rather than the public being saddled with the clean-up. Clean-up or pay-up is the message that should be sent and the financial challenges should be placed on the polluter, not victimize the end-user's financial and physical health. A precedent-setting ruling should not exempt farmlands from oversight and regulation. Shift the burden from rate payers onto the ones causing water quality problems.

Drainage in our area has been confirmed as problematic to water quality all the way to Lake Erie. 400,000 people in Toledo lost their safe drinking water in 2014 and the past several years one is able to see the algae blooms from space.

