TIPPECANOE COUNTY SOIL & WATER CONSERVATION DISTRICT



"Take care of the land, and the land will take care of you" -Hugh Hammond Bennett



ADOPTION STATEMENT

THIS PLAN WAS ADOPTED BY THE TIPPECANOE COUNTY SOIL AND WATER CONSERVATION DISTRICT BOARD OF SUPERVISORS ON SEPTEMBER 9, 2020.

CURT VANDERKLEED, CHAIRMAN MICHAEL STRASBURGER, VICE CHAIRMAN DOUG OSBORN, SUPERVISOR MELODY CLOUSER, SUPERVISOR SALLY UNSER, SUPERVISOR

The staff of the Tippecanoe County Soil and Water Conservation District are equally committed to carrying out the priorities established within this document to further the SWCD mission and its commitment to foster natural resource conservation and environmental stewardship.



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Organization

The Tippecanoe County Soil and Water Conservation District (SWCD) is a legal subdivision of state government; the only local unit of government responsible for coordinating the conservation of our soil, water, and related natural resources.

The Tippecanoe District was organized through a public referendum held in 1940 in accordance with the Indiana Soil Conservation Act, now amended. At its origin, only five townships were served by and included in the District. Over the course of time, the District has come to serve all of Tippecanoe County, including the once excluded cities of Lafayette and West Lafayette, as well as the smaller towns.

The official governing body of a Conservation District consists of five supervisors. Three are elected at the local Annual Meeting of land occupiers and two are appointed by the State Soil Conservation Board based upon recommendations of the leadership in the District. Selection of all five supervisors is based on input from the local people they serve, and as public officials responsible to the district and state, supervisors are required to subscribe to a standard public oath of office.

Purpose

The purpose of a Soil and Water Conservation District is to provide information about soil, water and related natural resource conservation; to identify and prioritize local soil and water resource concerns; to implement conservation practices and technologies, and to connect land users to educational, technical and financial assistance from local organizations and state and federal agencies.

Because each Conservation District develops its own programs to suit the needs of the people in its county, local citizens play an important role, and each district serves as a means for all interested people in a county to work together for natural resource conservation and development.

Days Gone By and a Fresh New Start...

Tippecanoe County's history leads back to densely wooded forests and abundant wildlife, to prairies and fertile farmlands, to wetlands and the Wabash River. This wealth of natural resources is what initially drew the first permanent settlers here in 1822, and led to the establishment of "Marquis de Lafayette" in 1825, now known as Lafayette. Tippecanoe County was established in 1826, and to accommodate progress, the Wabash and Erie Canal was constructed and arrived in Lafayette in 1843. West Lafayette was established in 1845, and the first railroad reached Tippecanoe County in 1851. Within 30 years, urbanization and progress replaced the native grasses and woodlands, with cities and modes of transportation, changing the natural landscape of Tippecanoe County forever.

Today, urbanization, mobility and the fast pace of modern life often separate us from daily personal contact with the nature. Yet even when they go unnoticed, these resources remain a powerful influence on our quality of life and our prospects for the future.

Recently, the SWCD sent out a survey to a diverse group of community members requesting assistance in the identification of local natural resource concerns. Based on the concerns identified, we are hopeful that our accomplishments through this Strategic Plan will fulfill their visions and those who have spent their lives here in the cities, in the rural areas, and along the banks of the Wabash. We will persistently move forward with comprehensive conservation programs and innovative approaches to put "conservation on the ground". It will translate into action by combining science and gentle persuasion to advance the conservation ethic, and by joining efforts with those of other conservation organizations and partners. Overall, this Plan encourages a thoughtful course of action that gives equal weight to the immediate and the long-term, as well as to the local and far-reaching impacts of our actions on the natural environment.

Our continued vision of natural resources for Tippecanoe County are:

- Soil Health
- Water Quality
- Invasive Species
- Wildlife Habitat

Throughout the plan, you will note that there are goals, strategies, and a public education and outreach component for each of these natural resources. Education has been a part of the Tippecanoe Soil and Water Conservation District's general objective for over seven decades, and we continue to believe that education is one of the most effective ways to guarantee the wise use of our natural resources for the future. Building public awareness will move us forward into the next decade while ensuring healthy soils, clean water, quality habitat, and an overall pleasing quality of life for the people of Tippecanoe County.

Our Vision:

Soil Health

Soil is one of the most important natural resources that we have on Earth. It gives us clean air and water, bountiful crops and forests, productive grazing lands, diverse wildlife, and beautiful landscapes.

Soil health concerns identified locally that will be addressed over the next five years are:

- •Excess nutrients in surface & ground water
- •Excessive sediment in surface & ground water
- •Sheet & rill erosion
- •Organic matter depletion
- •Pesticide transported to the surface & ground water
- Classic gully erosion
- •Excessive bank erosion from streams, shorelines or water conveyance channels

Local agricultural practices impact not just the individual farm, but also neighbors downstream and the community as a whole. Addressing the above resource concerns will have positive implications not only on the farm, but for everyone.



Soil Health

Goal 1: No till practices shall be increased by 2,500 acres.

Strategy 1: Host annual soil health field days targeting producers and landowners.

Strategy 2: Perform annual tillage transect.

Strategy 3: Increase outreach in targeted watersheds

Goal 2: Cover crops shall be increased by 2,500 acres.

Strategy 1: Host soil health field days targeting producers and landowners.

Strategy 2: Conduct annual cover crop transects.

Strategy 3: Increase outreach in targeted watersheds.

Strategy 4: Create/promote cost-share programs in incentivize cover crop adoption.

Goal 3: Five Hundred (500) landowners will be educated on improving soil health.

Strategy 1: Host soil health field days targeting producers and landowners.

Strategy 2: Increase outreach in targeted watershed. Strategy 3: Share soil health information via social media.



"Soil health is defined as the continued capacity of the soil to function as a vital living ecosystem that sustains plants, animals and humans. This definition speaks to the importance of managing soils so they are sustainable for future generations."

- USDA Natural Resources Conservation Service

Our Vision:

Water Quality

Water is essential for life on Earth and plays a vital role in the proper functioning of it's ecosystems. Water pollution has a serious impact on all living creatures, and can negatively affect the use of water for drinking, household needs, recreation, fishing, transportation and commerce.

"Water quality can be thought of as a measure of the suitability of water for a particular use based on selected physical, chemical, and biological characteristics."

- US Geological Survey

Water quality concerns identified locally that will be addressed over the next five years are:

•Excess nutrients in surface & ground water

•Excessive sediment in surface & ground water

•Pesticide transported to the surface & ground water

•Excessive bank erosion from streams, shorelines or water conveyance channels

One of the biggest local water quality pollutants is soil! When soil washes off the land and enters the water it reduces the clarity of the water and then settles at the bottom of rivers and lakes. The muddiness of the water harms aquatic plants and animals, fills up ditches and ponds, and dirties our drinking water.

When sediment enters the water there is more than just soil that washes in. This eroded soil can also carry nutrients and pesticides. These other pollutants can come from things like chemical fertilizers, manure or herbicides that had been applied to the land. Care must be used with applying these inputs to crop fields and lawns so that they don't end up in the water.

Water Quality

Goal 1: Seventy-five (75) acres of water quality practices will be installed.

- Strategy 1: Partner with local natural resource agencies to target filter strip installation.
- Strategy 2: Increase outreach in targeted watersheds and the Wabash River floodplain.

Strategy 3: Create/promote cost-share programs to incentivize water quality best management practices.

Goal 2: Fifty (50) landowners will be educated on streambank stabilization.

Strategy 1: Develop inventory of erosive streambank stabilization areas.Strategy 2: Conduct a streambank stabilization workshop.



"A watershed is a land area that channels rainfall and snowmelt to creeks, streams, and rivers, and eventually to outflow points such as reservoirs, bays, and the ocean."

- National Oceanic and Atmospheric Administration

Water connects us all. What happens locally affects not only our water, but also has impacts downstream. Water in Tippecanoe County will eventually end up in the Wabash River, which then flows into the Ohio River, which joins the Mississippi River, and ultimately flows into the Gulf of Mexico. This means that actions we take locally will not only impact our water quality here in the county, but affects the whole system all the way down to the ocean!

Our Vision: Invasive Species

"Invasive species are non-native species whose introduction does or is likely to cause economic or environmental harm or harm to human health."

- US Department of Agriculture



Invasive species include a variety plants, animals and other living things. They are not native, meaning that they evolved somewhere else in the world. Some species were brought intentionally, including many plants used for landscaping. Other invasive species arrived accidentally, like aboard cargo shipments.

Once invasive species arrive in a new area, they quickly become established and compete for resources with native species. Invasive species do not fill the same role in our ecosystem as the native ones, and therefore disrupt the whole food chain. Since they are not a part of the checks and balances of a natural system, invasive species need to be controlled by human intervention. Without our help, we could lose many native species.

Invasive species concerns identified locally that will be addressed over the next five years are:

•Invasive plants and noxious weeds

Invasive Species

Goal 1: Five hundred (500) acres of invasive species control will be implemented.

Strategy 1: Host invasive species removal work days.

Strategy 2: Create/promote cost-share programs to incentivize invasive plant control.

Goal 2: Five hundred (500) landowners will be educated on the negative impacts of invasive species.

Strategy 1: Host educational field days focused on invasive species.Strategy 2: Share invasive species information via social media.Strategy 3: Create/provide educational printed material on invasive species.

The first step in addressing invasive species is education. Public awareness of the issue is essential. If people aren't aware of a problem, how can they fix it? When landowners are aware of what species are invasive, they can then make better-informed management decisions for their property.

Controlling invasive species can be an expensive and labor-intensive endeavor. Unfortunately, many invasive species remain unnoticed until there are so many of them that they begin to do obvious damage to the surrounding ecosystem. At that point, getting rid of them will be more difficult that if they were found sooner. So, early detection is a key strategy in invasive species control.



<u>Our Vision:</u> Wildlife Habitat

Habitat loss is one of the greatest threats to wildlife. Tippecanoe County hosts a variety of habitat types including woodlands, prairies, wetlands and rivers. Many acres that were formally natural areas have been converted to other land uses, like homes, businesses, roads or farmland. These changes on the landscape impact the abundance and diversity of local wildlife.

The benefits of habitat restoration extend beyond just assistance to wildlife. Healthy habitats can also help protect water quality, improve soil health and reduce the impacts of climate change. Additionally, these areas provide green space for people to enjoy as well.

> "Habitat is a combination of food, water, shelter, and space arranged to meet the needs of wildlife."

> > - US Department of Agriculture

Wildlife habitat concerns identified locally that will be addressed over the next five years are:

•Inadequate cover/shelter, food, water

•Inadequate habitat continuity (space)



Wildlife Habitat

Goal 1: Two hundred fifty (250) acres of upland grassland/pollinator habitat will be installed in Tippecanoe County.

Strategy 1: Partner with local natural resources agencies to target pollinator habitat installation.

Goal 2: Two hundred (200) acres of wetland restoration habitat will be installed in Tippecanoe County.

Strategy 1: Partner with local natural resource agencies to target wetland restoration installation.

Strategy 2: Create/promote cost-share programs to incentivize wildlife habitat installation.

Goal 3: One hundred (100) acres of trees will be installed in Tippecanoe County.

Strategy 1: Partner with local natural resource agencies to target tree planting.

Strategy 2: Create/promote cost-share programs to incentivize wildlife habitat installation.

Goal 4: Five hundred (500) landowners will be educated on the importance of wildlife habitat.

Strategy 1: Host wildlife field days targeting landowners.Strategy 2: Share wildlife habitat information via social media.Strategy 3: Promotion of native tree and plant sales.

Strategy 2: Create/promote cost-share programs to incentivize wildlife habitat installation.

Tippecanoe Soil & Water Conservation District - 81 Years and Counting -

The Tippecanoe Soil and Water Conservation District was created in 1940 to serve county farmers by helping them to conserve their soil and water resources.

During the 1950s, 1960s, and 1970s, the District became deeply involved in broader-based issues, including flood prevention, inventorying of county soils, and land use planning. The District staff consisted of one part-time secretary whose responsibilities were directed by the USDA Natural Resources Conservation Service's District Conservationist.

The 1980s presented a new set of challenges, including technical issues such as non -point source pollution and groundwater protection. The 1990s were a time of accelerated urbanization and growth in Tippecanoe County, and programs addressing those needs, including sediment control and stormwater management, were added. District staff was increased to two full-time employees and one part-time.

The beginning of the new century was marked by the continuing diversification of programs and related activities. As demand for urban education continued to grow, new positions were created focused on water education and urban conservation. Both positions were later moved to other County agencies. 2020 entered in an unprecedented time with the Covid-19 Pandemic. During the year, the Tippecanoe Soil and Water Conservation District got a NACD 2-year grant which funded a Technical Support Specialist position. Also in 2020, a long standing staple of the SWCD, Chris Remley (District Administrator), retired.

Currently, the District has a staff of two full-time employees and an NACD Grant funded position to address the ever-increasing demand for natural resource information, education, and technical assistance.

Subsequently, it is the goal of the Tippecanoe County Soil and Water Conservation District board, staff, and supporters to continue to grow and change in response to the needs of our community now and in the coming years.

Vision Statement

The Soil and Water Conservation District is recognized by the community as Tippecanoe County's foremost conservation organization providing leadership and assistance through promotion of natural resource stewardship and responsible planning.

"Conservation is humanity caring for the future."

- Nancy Newhall

Mission Statement

The Tippecanoe County Soil and Water Conservation District is committed to provide quality technical, educational, and informational resources for the community through leadership, service, and citizen involvement to foster natural resource conservation and environmental stewardship.



"Conservation is a great moral issue, for it involves the patriotic duty of insuring the safety and continuance of the nation."

- Theodore Roosevelt

