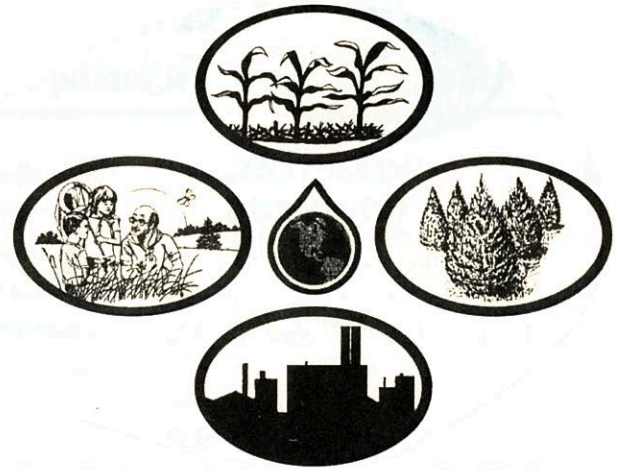
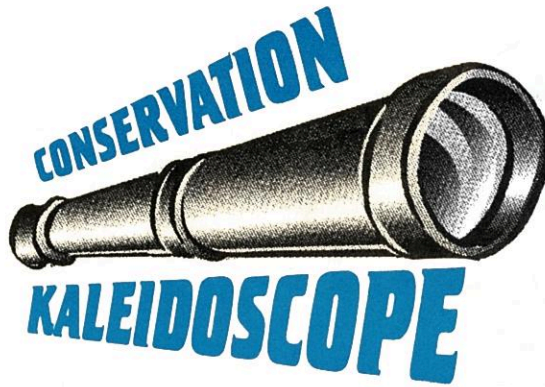




St. Joseph
County
Soil & Water
Conservation
District



Today's Visions for Tomorrow's Future

Jan/Feb/Mar 2006 5605 U.S. 31 South, Suite 4 *South Bend, IN* Telephone (574) 291-7444 Ext.3 Editor: Troy Manges
Volume 8, Issue 1 Website: stjoseph.iaswcd.org Fax (574) 291-0284 Tonia Albright

Calendar of Events

January 2

New Year's Day Holiday
Office Closed



January 16

Martin Luther King, Jr's
Birthday, Office Closed

January 17

SWCD Monthly Board Mtg.
7:30 AM – Farm Bureau
Mtg. Room

February 4

Science Alive



February 7

Tree Seminar
6:30 PM—Farm Bureau
Mtg. Room

February 20

President's Day
Office Closed

February 21

SWCD Monthly Board Mtg.
7:30 AM– Farm Bureau
Mtg. Room

March 1

Tree Order Forms Due



March 20

SWCD Monthly Board Mtg.
7:30 AM – Farm Bureau
Mtg. Room



John Juhasz

46th
Annual Meeting

Friday
January 27th, 2006
St. Adalbert's Heritage Center
6:30 p.m.

Tickets: \$8.00/ea.
Polish Style Dinner
Guest Speaker: John Juhasz
Reservations are due January 19th
*In the event of inclement weather, the meeting
will be held on February 10th*

REMINDER

**TREE ORDER FORMS
ARE DUE
MARCH 1ST**



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THE NATURAL EDUCATOR

IT'S WINTER TIME, TIME TO GO A HIKING

Well the holiday season is over and many of us will be thinking of ways to rid ourselves of that holiday bulge.

Well, I have an excellent way to get a little exercise, a winter walk. Fresh cold air will help burn away the calories and winter is some of the best time to see wildlife. In St. Joseph County we are blessed with some great county parks. Spicer Lake and Bendix Woods have nice hiking trails and will be somewhat secluded this time of year.

Or if you really want to get away from the crowds and don't mind areas with no marked trails, you might want to try Place Trail Marsh.

Another great out of the way winter time area to explore (also good for cross county skiing on your own) is Kingsbury Fish & Wildlife Area. This 7,000 acre state property is located in LaPorte County, approximately on the corner of Hwy 6 and Hwy 35, just follow the signs from there.



But just don't go hiking, go exploring. If you see a hollow tree, pick up a sturdy stick and knock on the tree. Not so hard to hurt the tree, just enough to let anyone in the tree know you are there. You may have to knock for a minute or two.

Once I did this and three Flying Squirrels came out of one opening, a woodpecker out of another and finally a sleepy raccoon looked out of a third.



Have the kids open up the seed tops on Queen's Anne Lace or Wild Carrot. All kinds of insects will hibernate in them. It is also easy to find insect galls, especially on Goldenrod. These will be little ball shaped structures on the stem of the plant. Cut inside one to find the larva inside. These guys make great ice fishing bait (another great winter activity).

If you find a pine forest, look on the ground for owl pellets. Owls do not digest the fur and bones of their prey and form them into a pellet that they regurgitate. By dissecting them you can figure out what they are eating.

There are a couple of things to remember about a winter hike. Dress in layers. You will be amazed at how warm you get from just walking. If it is a sunny day with snow on the ground, make sure everyone wears sun glasses, including the little ones. And remember if you keep the feet and the head warm, the rest of the body will follow. Good boots and a hat are necessities of a winter hike.

You might want to take an animal track identification book with you

and when you find a track, follow it, and you may be amazed were it will lead. And finally, have fun.

For more information on St. Joseph County Parks visit www.sjcparks.org or call 574-277-4828

Kingsbury Fish & Wildlife area
219-393-3612

WINTER ACTIVITIES

While on your winter hike, collect pine cones and bring them home. Once home, smear them with peanut butter and roll them in bird seed. Then hang them in your yard.



ENVIRONMENTAL EDUCATION PROGRAMS

The SWCD can provide a variety of education programs for your group, organization, summer camp or classroom.

Presentations cover a wide range of topics, from soil to water quality, earthworms to birds, reptiles to life in a hollow tree and much more. We can also provide talks on conservation programs that are available through the farm bill.

If you are interested in a presentation by the Soil & Water Conservation Partnership, just call the office, 574-291-7444 ext. 3

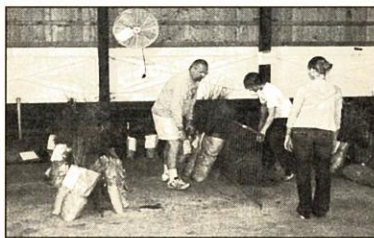


WOODLAND TIMES

Forestry News Updates for St. Joseph County



It is not too late to get your trees ordered for this Spring. The order deadline is March 1, 2006. The tree pick-up date will be April 22, 2006, from 8 AM to 12 PM at the Swine Barn at the St. Joseph County 4-H Fairgrounds. We hope to see you there!



Workers arranging the orders ready to be picked-up.

Tree Selection and Planting Seminar

The St. Joseph County Soil and Water Conservation District is hosting a tree Selection and planting seminar on February 7, 2006, from 6:30 PM to 8:30 PM. The seminar will be at the St. Joseph County Farm Bureau Building Meeting Room. To reserve a spot at the seminar please call us at (574) 291-7444 ext. 3.

2005 Forestry Field Day ~ Tree-rific Success

A beautiful fall day, a well-managed woodlot, knowledgeable speakers, and an interactive crowd. Put them together and you have the makings of another successful forestry field day.

Nearly fifty participants were treated to such a day on September 17 at the Carl and Barbara Diehl farm for the annual 3-County Forestry Field Day. The field day was sponsored by the Soil and Water Conservation Districts of Kosciusko, Elkhart, and St. Joseph counties.

The program began with welcoming words and property history from host Carl Diehl. A presentation was also given by Dee Moore about Indiana's COVERT program, one of the field day's sponsors. Jack Seifert, Indiana's recently named DNR State Forester, was a guest speaker who shared the state's new direction with respect to timber management and production, as well as new assistance programs.

Participants were able to tour a part of the Diehl tree farm, as experts explained management techniques being used to manage the woods for timber production. Session included: Tree Thinning, Tree Inventory, Timber Stand Improvement, Tree Health Plot and Assistance Programs. Speakers were DNR District Forester Tim Eizinger, and Consultant Foresters Bruce Wakeland, Tom Crowe, and Chris Egolf. After the tour, a timely discussion about the Emerald Ash Borer was given by Tim Eizinger.

The woods provided a picturesque backdrop to a catered lunch, which was generously provided by Walnut Street Hardwoods, Quality Hardwoods, and Post Hardwoods. Participants went home with informative packets from Kosciusko County Convention and

Visitor's Bureau and Purdue Cooperative Extension.

Featured Tree Species

We thought it would be a good idea to inform you of a couple of trees that are on our order blank this year. The first tree we are going to talk about is the American Arborvitae. This tree grows well in hardiness zones 3-7. It is an evergreen tree and can grow to a height of 60 feet with a spread of 12 feet. It has a slow to medium growth rate and likes full sun. It does well in most soil types. The narrow, pyramidal form of the American Arborvitae makes it a good choice for a windbreak or hedge. It also provide winter shelter and summer nesting sites for many types of birds.



American Arborvitae

Another great tree on our order blank is the Common Lilac. It falls into the flowering trees and shrubs category. It grows well in



Common Lilac

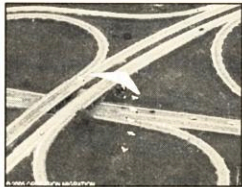
hardiness zones 3-7. The Common Lilac can grow 8 to 15 feet high and have a 6 to 12 feet spread. It has a medium growth rate and likes partial to full sun. It grows well in moist and dry soils. The Common Lilac has a round shape and blooms in late Spring. It can be used as an individual plant, hedges and windbreaks. It provides nesting places for birds and attracts butterflies.



FIELD NOTES



Whooping Crane Expedition Launched



Operation Migration launched their fifth Whooping Crane migration flight this past October.

The young endangered Whooping Cranes learn traditional migration routes by following ultralight planes from northern Wisconsin to Florida.

These flights are designed to restore migratory populations of the endangered birds. Past routes have led the team through approximately 14 Indiana counties with three overnight stops.

Researchers are working to restore flocks of Whooping Cranes that will spend summers near Necedah National Wildlife Refuge in central Wisconsin, and migrate to Chassahowitzka National Wildlife Refuge in Florida.

In the first five years of the program, approximately 60 birds have been taught a migration route between Wisconsin and Florida. This is 4 times the number of whoopers that existed in the early 1940's.

The birds have been returning to Wisconsin in the spring on their own.

Whooping Cranes are the tallest birds in North America standing 5 feet tall with a 7 to 8 foot wingspan. Whooping Cranes mate for life and can live 25 years or more in the wild.

Like many birds, Whooping Cranes learn their migration route by following their parents. But this knowledge is lost when the species is reduced and there are no longer any wild birds using the flyway.

Until Operation Migration was asked by the U.S. Fish and Wildlife Service to spearhead a reintroduction of the world's most endangered cranes, there was no method of teaching migration to captive-reared whooping cranes released into the wild.

Operation Migration works in partnership with nine private and government agencies known collectively as the Whooping Crane Eastern Partnership.

For more information and photo's on the Whooping Crane Operation Migration expeditions log on to:

www.operationmigration.org/index.html



Wetland Restoration Opportunities

Do you have an area in a field which often gets drown out? Instead of continually trying to plant the area with little success, you may want to consider wetland restoration. If the area has hydric soils, you may be a good candidate.

You may have heard about the Wetland Reserve Program (WRP) which can help landowners restore wetlands on their land. The WRP program may pay for some or all of the restoration cost as well as an easement on the land. This is a fantastic program yet not all eligible land can be enrolled due to limited funds being available and a minimum acreage of 5 acres. Each WRP application is ranked based on multiple factors and only the highest ranking projects are funded.



A lesser known option for wetland restoration is through the Continuous Conservation Reserve Program (CCRP). This is the same program which provides cost-share and land rental payments for filter strips and grassed waterways. As with all CRP eligible land, the area must have been planted to crops at least 4 out of the 6 years between 1996 and 2002. Any size wetland can be restored with this program. Areas of restored wetlands can receive 50% of the cost of establishment as well as 25% of the cost of restoring the hydrology of the site. The land taken out of production also receives a yearly rental payment for 10-15 years and is based on the soil types.

If you think you may be interested in restoring wetlands on your property, feel free to give us a call at 574-291-7444 ext. 3 and we would be glad to discuss options and programs with you.



FIELD NOTES

What Will Fall Tillage Cost You?

Sky rocketing fuel prices are on nearly everyone's mind. But how many will take the time to pencil out the real costs and manage accordingly. Today we have real technological advancements in tillage systems as well as some great tools to analyze the economics of the many options. One of my favorites is the Machinery Cost Calculation Worksheet (w/database), available at <http://www.apec.umn.edu/faculty/wlazarus/machinery.html>, and developed by Bill Lazarus, Extension Economist, U of MN and Roger Selley, Extension Farm Management Specialist, U of NE. This spreadsheet allows you to look at the cost of any tillage operation and adjust for changes in fuel cost, taxes and interest, etc.

After running just a few scenarios, it becomes evident that the cost to till is significant. For instance, chisel plowing alone will have an operational cost of over \$5.75 per acre, with a total cost reaching almost \$8. Remember, chiseling also commits you to at least one trip with a field cultivator or disk next spring at an operating cost of over \$4.00 per acre (at today's fuel prices), no matter what the weather is next year.

The questions that each farmer must ask each time they hook to an implement are:

- What kind of return in production do I expect from this operation?
- What problems am I expecting this tool to remedy that may benefit future soil quality?
- Is the time spent on the tractor going to pay more than the same time devoted to management?"

There are a lot of studies and comparisons that indicate that today's no-till systems, yield comparable, and in many cases better, than con-

ventionally tilled systems. Add to that, the cost saving potential and the additional time devoted to marketing and management; and profitability should be favorable.

So why will so many farmers be hesitant to look at the answers to these questions? The reason is likely risk. Any time a business makes changes in production process or product line, there are inherent risks. Most of us resist change, and get comfort from continuity. As with the American auto industry, U.S. agriculture will need to become more efficient if we are to compete with our neighbors to the South. They will be less affected by oil prices since no-till is the predominant system throughout South America.

The risks in transitioning to no-till are much lower today due to the information network that is available. The Indiana Conservation Tillage Initiative is committed to compiling successful no-till strategies that have been developed and implemented on Indiana farms and sharing these strategies with new no-till farmers. Additionally, the Indiana Conservation Partnership field staff have technical knowledge and financial assistance programs to offer. This assistance can ease the risk of any producer transitioning to a more efficient cropping system. Another strategy is risk protection programs, which have been piloted in Indiana by The Nature Conservancy. These programs offer risk protection to farmers in targeted watersheds to reduce risks of transition.

In addition to risk management, more than ever before farm operations now must follow efficient business models. Greater efficiency will help profitability grow. I have heard it said that, "If we keep doing what we did, then we'll get what we've got"...or will we?

Below are some additional tillage implement costs taken from the Machinery Cost Calculation Worksheet.

Averages by Implement Type Over All Sizes		
	Use- Related	Total
	\$ Cost/ Acre	\$ Cost/ Acre
Chisel Plow, Front Disk	8.08	10.61
Moldboard Plow	13.71	17.17
Field Cultivator	3.14	4.06
Tandem Disk	5.05	6.30
Tandem Disk H.D.	6.54	8.51
Offset Disk	8.14	10.54
V-Ripper	8.02	10.25
Subsoiler	15.80	19.61
Comb Fld. Cult. Incorpor.	5.11	6.68
Comb Disk & V-Ripper	11.90	15.67
Disk, Fld. Cult. Finish	6.35	8.44
Roller Harrow	4.00	5.23
Min-Til Planter	7.77	10.48
Air Seeder Drill w/Cart	7.56	10.92
Rotary Hoe	1.60	2.02
Anhydrous Applicator	5.23	6.56
Stalk Shredder	7.61	9.85

Article provided by Barry Fisher, NRCS
Conservation Tillage Specialist



URBAN MEANDERINGS

Results of the Water Quality Awareness Survey

In the past, we viewed storm water as a waste product from the sky. Municipalities diverted it into their sewer system. It was a quick and efficient way to remove it from our city streets. This great resource was once considered as being a public nuisance, now it is viewed as a contributor to water quality. It can have a positive or a negative affect on our watersheds and our ground water. The choice is up to us and how we protect it.

Now we are installing storm water systems, otherwise known as a MS4 (Municipal Separate Storm Sewer System), in urban developments. A Municipal Separate Storm Sewer System is a functional tool used in collecting storm water and improving storm water quality.

Now that the attitudes of our municipalities have changed, each individual's attitude must also change. Every action that we take (and neglect to take) has an affect on our watersheds. We must watch what goes down the storm drains. Most of us know of some obvious pollutants not to put down the storm drains, but we don't realize what impact our daily activities have on our watersheds.

Last winter you may remember filling out a Water Quality Awareness Survey on storm water quality. The survey was intended to educate and inform the public on storm water quality issues and bring awareness to the community of the changes to come. Over 1,700 residents from MS4 entities in South Bend, Roseland, Osceola, Ivy Tech State College and St. Joseph County participated in this survey. The results of the survey are explained below.

1.) What is storm water?

a.) Any water that falls from the sky.

The majority of residents answered this question incorrectly. They thought that "any water that goes into the storm sewer drains and drainage ditches" is considered storm water. This was a tricky question. Storm water is defined as water resulting from rain, melting or melted snow, hail or sleet.

2.) Why is water quality important?

e.) All of the above.

Most participants answered this question correctly. We all like streams and lakes that look and smell good, healthy fish populations, safe water to play and swim in and safe drinking water. That is why it is important to protect water quality in our community.

3.) What is the difference between a separated storm sewer and a sanitary sewer system?

a.) A storm sewer provides drainage for streets and a sanitary sewer is for household wastes.

The majority of participants got this question correct. Storm sewers are designed for storm water only. They are not designed to treat wastewater, chemical waste, or other pollutants. Sanitary sewers are designed to carry away household wastes to a treatment facility that can properly handle them.

4.) What do you see as the underlying causes of pollution in our local waterways?

(There is no correct or incorrect answer on this question)

Most survey participants (41.4%) thought that the underlying problem of pollution in our local waterways was caused due to the lack of education-people do not know how to protect the local waterways. 23.2% of survey participants had the opinion that the federal, state and local government does not enforce environmental protection laws. Of the remaining participants, 17.8% thought that people don't really care what happens to the local environment, 11.2% thought that pollution prevention practices cost too much for business to afford, and the remaining 6.4% of the population had their own opinions of underlying causes of pollution in our local waterways.

5.) What is your level of storm water pollution prevention knowledge?

(There is no correct or incorrect answer to this question)

Most survey participants (65.3%) considered themselves as having a little knowledge in storm water pollution prevention, 20.6% of participants listed themselves as having no knowledge on the subject, and the remaining group (14.1%) thought that they were experts with a high level of storm water pollution prevention knowledge.

6.) Which of the following benefits are

found when maintaining a natural buffer zone of grasses and trees along ditches and streams?

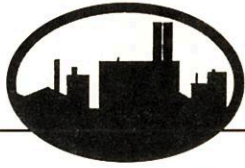
d.) All of the above.

Most of the participants answered this question correctly. Natural buffer zones such as wooded river banks and grassy stream banks prevent soil erosion by holding the soil in place with grass, plant or tree roots and shield the soil surface from large rain droplets. These buffer zones filter sediment, excess nutrients, and chemicals out before they reach the ditch or stream and also protect the ditch or stream from thermal pollution. These buffer zones are important measures to filter out everyday pollutants that come from our vehicles, landscaping activities and winter maintenance activities that end up on our roads, parking lots and sidewalks. Buffer zones shade streams and offer a cool, protected surface for storm water to trickle through instead of a concrete or asphalt warming pad. Many fish and aquatic species depend on clear, clean and cool waters. In urban settings, we try to push contractors and plan designers to use rain gardens, park lawns and grass swales for these same reasons.

7.) What are some things that are safe to put into a storm sewer?

d.) None of the above.

A little over half of the participants answered this question correctly. Almost everyone knew that motor oil and antifreeze from your vehicle were not appropriate to dump into a storm sewer, but about 30% of the participants thought that it was alright to put muddy water from cleaning garden tools into their storm sewer. Silt and sediment, even small amounts from garden tools, can accumulate in our watersheds and limit the holding capacity of storm water detention or retention areas. Silt and sediment can also cause extra maintenance costs for municipalities to clean out sediment traps and clogged storm sewer lines. Soapy water from washing a car was an activity thought as acceptable for about 9% of the participants. According to the EPA (Environmental Protection Agency), the wastewater that runs off of a car when it is washed contains a range of substances like soaps, detergents, mud, rubber and grease. Cars should be washed on grassy areas or driveways that drain on a lawn or garden area. Never wash your car on the street or driveway that drains directly to the street.



URBAN MEANDERINGS

Storm sewers are designed to handle one thing only, and that is storm water and storm water volume. Remember they are not designed to treat or handle anything over their volume capacity. Other things that should not go into storm sewers and grass swales include septic system effluent, pool water, run-off from irrigation, and other organic or hazardous materials.

8.) Sweeping lawn and garden trimmings into the gutter or down storm drains is good for nearby streams and creeks?

False

Many residents do not realize that grass clippings and garden trimmings can be a source of pollution. Some of the fertilizers that we use on our lawns and gardens contain phosphorus, a chemical that can cause algae blooms in our streams, rivers and lakes, decreased water clarity, undesirable odors, increased eutrophication in lakes and fish kills.

Some good practices include: using a mulching lawn mower, keeping grass clippings off the streets and sidewalks, utilizing a city composting program, and (if possible) creating your own compost pile. Never store grass clipping piles and yard waste piles in detention basins, on the edge of retention ponds, in grass swales or along the curbside (especially near storm inlets).

9.) Erosion and sediment control from unvegetated areas of property are the landowner's responsibility?

True

The landowner is responsible for maintaining his or her property if an area is left disturbed for more than fifteen days. They may hire a contractor to install appropriate erosion and sediment control measures for their disturbed property. Erosion and sediment control measures include: entrenched silt fabric fencing or staked straw wattles (straw socks) along the perimeters that slope downward in a sheet flow, staked and entrenched straw bales or rip rap rock check dams in concentrated flow areas (grass swales and ditches), stabilization of steep slope areas with erosion.

Erosion control blankets, packed straw mulch and hydro-seeding, and lot stabilization by seeding, laying sod or mulching. These are only a handful of

measures out there to use for disturbed lots. There are other more organic and effective methods you can use too.

10.) Tracking mud onto streets and allowing dirt to drain from construction sites before, during and after construction will impact water quality and aquatic life?

True

Silt and sediment can contribute to deposition (soil accumulation) and cause visibility and water clarity problems in our streams, rivers and lakes. Silt and sediment deposition can lead to changes in a watershed's physical shape, flow patterns and affect marine navigation. It can also affect the breeding grounds of certain fish and aquatic species. Visibility and water clarity issues are a cause for concern in aquatic species too. Some species of plants and microorganisms cannot grow in a muddy environment where light can not penetrate to the bottom of a lake or river bed. Therefore, the aquatic species become over-dominated by invasive species that thrive in these particular environments. Contractors must have certain measures on site and procedures on an erosion control plan. Contractors must use construction entrances made of gravel and they can use vehicle washing stations to decrease the amount of sediment tracked onto the road. Silt fencing and other perimeter protection measures will help keep sediment on the construction site. Regular street sweeping on and off site is required to pick up any stray sediment that has exited off the job site.

11.) What does MS4 stand for?

c.) Municipal Separate Storm Sewer System

MS4 means a conveyance, or system of conveyances including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains.

12.) Which of the following is not a designated MS4 entity?

c.) Lakeville

The reason Lakeville is not an MS4 entity is because it lacks certain criteria required for MS4 designation. Criteria is based on 2000 Census Bureau data of population, percent change in population growth, full-time equivalent enrollment populations and whether the entity is connected to a

regulated MS4 entity or has documented evidence of contributing to the impairment of water quality.

Most participants answered this question correctly, however, many answered d.) Ivy Tech Community College. We now know that universities, colleges and hospitals could be a designated entity due to their fulltime equivalent enrollment population and other criteria.

13.) In accordance with new storm water regulations (Rule 13), MS4 entities need to submit Storm Water Quality Management Plans to _____?

a.) Indiana Department of Environmental Management (IDEM)

Indiana Department of Environmental Management (IDEM) will be the agency regulating MS4 entities.

14.) How much money would you be willing to spend a month to have a cleaner river and storm water?

(There is no correct or incorrect answer to this question)

Out of all the survey participants, 50.7% said that they would be willing to pay \$5 to \$10 dollars towards improving water quality, 30.1% said that they would not be willing spend any money towards improving water quality, 10.5% said that they would be willing to pay \$10 to \$15 towards improving water quality, and 8.7% said that they would be willing to pay \$15 to \$20 towards improving water quality.

Survey demographics:

8.1% of survey participants belonged to an environmental organization.

69.5% of survey participants were married and 30.5% were single.

52.3% of survey participants were male and 47.7% were female.

3.3% of survey participants were African-American, 1.0% were Asian-American, 92.9% were Caucasian, 1.2% were Hispanic, 1.6% were of a different race.

0.4% of survey participants were under 18 years old, 68.9% were between the ages of 18 and 64, and 30.7% were 65 years old or older.



St. Joseph County Soil and Water
Conservation District
5605 U.S. 31 South, Suite 4
South Bend, IN 46614

St. Joseph County Soil And Water

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MISSION

To provide guidance and education to the youth and adults of St. Joseph County and to administer programs to preserve, protect and improve soil, water, air, plant, and animal resources for future generations.

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