Welcome to Pathway to Water Quality's Volunteer Information

For the 2024 Indiana State Fair- August 2- August 18, 2024

General Volunteer Information

Pathway to Water Quality is a model watershed located in the northeast section of the Indiana State Fairgrounds, modeling the path water travels through different land uses. What was once a parking lot in 1993 has grown up to be a lush, shaded, serene retreat on the Fairgrounds, where young and old alike can learn how our actions impact soil health and water quality on a daily basis. It is the premier showcase exhibit for the Indiana Conservation Partnership (ICP). If you have any questions as you read about the various volunteer positions available during the 2024 Indiana State Fair, contact the PWQ coordinator, Sara Peel, 765-337-9100, pathwaytowaterquality@gmail.com.

Pathway to Water Quality: Where Does Your Water Shed?

- ***Pathway is a watershed*** showing that land 'sheds' water, or drains, to a common place. Visitors can "***Walk the Path the Water Walks***."
- ***Water is affected differently by different land uses***. Visitors can tour different land uses at Pathway that are present in a watershed, including urban and agriculture lands and forests.
- ***There are many ways to keep the water clean and safe, and improve soil health***. Pathway shows how we care for our natural resources.

Volunteers are an important face for the Indiana Conservation Partnership as people visit ***Pathway to Water Quality***. Please be friendly, relate the conservation messages of the exhibit and engage visitors in conversations.

You will find additional information on PWQ on our website, including links to the volunteer sign-up, this document on serving as a volunteer, PWQ brochure and map.

Our Sponsors:

Pathway to Water Quality is sponsored by the organizations and state and federal agencies that comprise the Indiana Conservation Partnership. All of these entities are partners who are committed to water quality and soil and water conservation in Indiana:

- Indiana Association of Soil and Water Conservation Districts and the 92 county SWCDs
- Indiana Department of Environmental Management
- Indiana Department of Natural Resources
- Indiana State Department of Agriculture Division of Soil Conservation
- Purdue University Cooperative Extension Service
- State Soil Conservation Board
- USDA Farm Service Agency
- USDA Natural Resources Conservation Service

Video Introduction to Pathway

There is a *short video* to acquaint you with the PWQ exhibit. It will be helpful for those of you who have not volunteered before, or who have not been to the exhibit for a few years. ***Pathway*** changes every year so take time to get acquainted with PWQ at the Indiana State Fair! The video is located on **PWQ's home page**.

Things to remember at Pathway

- **Ambassadors:** This is the ninth year of our Pathway Ambassadors who are to move throughout the exhibit answering questions and interacting with guests - one ambassador will be stationed in the Pathway to Water Quality and the second in the Soil Health Area. You are not expected to be an expert! Learn more about ambassadors from the PWQ Volunteer training video.
- **Interpretive Signs:** You will see interpretive signs around the exhibit. These were developed and designed by students enrolled in a Ball State University Department of Natural Resources Immersive Studies class. All signs include a QR code to direct visitors to a resource page on our Pathway website where they can find additional information about all the major topics found in the exhibit.
- **Green Roof:** The greeter shelter built in 2016 has eight years' of plant growth on its "green" roof. The green roof captures water and demonstrates conservation to attendees.
- This year's theme is "The Art & Nature of Fun."

Volunteer Positions

The **online volunteer registration** provides the shifts available each day. Please sign up by **July 1** in order to ensure you receive your State Fair admission ticket by fair time.

Waiver of Liability

The Indiana State Fair (ISF) requires anyone who volunteers at the exhibit to (electronically) agree to the ISF's waiver of liability. When you register online for a shift, you must check the box indicating "you have read the ISF waiver of liability" and agree to the terms of the waiver.

Greeter Area

This position is critical to drawing visitors to ***Pathway*** during the fair. The *Greeter* is positioned at the entrance. People who sign up for this position should be friendly, outgoing individuals who really enjoy talking with others and inviting them into the exhibit. The greeter's primary responsibilities are:

1. Promote any demonstrations taking place at PWQ throughout the day. We'll provide you with a schedule.
2. Encourage children to visit the interactive education area when it is open (12:30 to 7 p.m. daily).
3. Ask visitors as they are entering or leaving Pathway to play the "*Wheel of Conservation*." They spin the wheel and answer a question about soil and water conservation. Right or wrong, they will get a small prize (bookmark, tattoo, etc).
4. Be helpful with any other State Fair information (refer to the ISF program for exhibits, shows, etc.; direct people to the nearest restroom).

Home Area

Ambassadors in this area will talk about practices to protect water quality, including utilization of native vegetation, phosphorus-free fertilizer, a pervious concrete driveway, and a rain garden and rain barrel. A septic system model is located in the back of the house. Several practices have handouts that are available in the clear boxes located on the gazebo posts. Extra copies are in the cabin. If supplies of any handouts are running low, let the day coordinator know.

Raised Bed Garden: a 4 x4-foot raised-bed vegetable garden with cover crops shows how a small garden can be incorporated into a living space. See information on **raised bed / container gardening.** See this **fact sheet** and **publication** for more information on gardens and cover crops.

Rock waterfall: Visitors should be aware that soil is covered by these rocks, protecting it from erosion.

Water running over rocks tends to cleanse itself as impurities bubble out. Also, the sound of running water attracts wildlife.

Pervious concrete: The pervious concrete path extends completely throughout the exhibit. Pervious concrete contains openings that allow rain water to soak through into the soil below. This helps replenish groundwater supplies, making more water available for humans, animals and plants. Standard concrete, asphalt and other nonporous paving materials divert rainwater into ditches and waterways keeping it from soaking into the ground. The faster water runs off paved areas, the more likely it is to cause soil erosion and allow pollutants to get into our drinking water supply. Our contractor for all of PWQ's pervious installation is Jim Miller, of C2 Products in Arcadia, Indiana.

Model home: This model home demonstrates some conservation activities available to homeowners. The home makes good use of trees. Summer shade lowers energy needed to cool the home. Trees growing on the west side form a wind break, helping to keep the home warmer in winter. The yard is well covered in grass. This holds soil in place and allows rainwater to slow down as it runs off, allowing more water to soak into the ground. Fertilizers used on the yard are phosphorus-free and contain only the needed amounts of nitrogen and potassium. This lowers the amount of fertilizer running off into waterways during heavy rains, thereby decreasing algae blooms in lakes and streams.

Native plants areas: Native plants and flowers growing around and behind the home provide natural food and shelter for wildlife. Natives are attractive additions to the yard. The flowering plants add color at varying times of the season, and grasses form edging, dividers and barriers. Their growth patterns and nutritional content fill the needs of native wildlife. Non-native plants produce attractive blooms and green leaves, but do not provide the nutrients needed by Indiana's wild creatures.

Native plants also keep soil in place. Their long roots hold securely throughout the seasons including periods of flood and drought and they create tunnels in the soil to allow for better infiltration. Many non-natives aren't as deeply rooted. Native plants also grow in a symbiotic relationship, meaning they keep each other in check, ensuring that each species will be available when needed. Non-natives can become invasive, over-crowding native plants. Some crowd out all natives and leave the soil below them bare and exposed to erosion.

Rain barrels are used to conserve water and reduce runoff. The barrel, located at the corner of the home, gathers water running off the roof. The water can be used to water plants, wash cars or fill any other outside need. This lessens the need for municipal water lowering the demand on the utility and the homeowner's water bill.

Rain gardens are plant-filled depressions in the yard. They collect rainwater and hold it for a few days, allowing it to soak into the ground. This replenishes groundwater supplies and lessens erosion from runoff. The plants are native to the area. They are water-loving; they store water in their leaves and stalks, releasing it as needed by the plant and the surrounding soil. This reduces the homeowner's need to water.

Compost bin: The compost bin provides the homeowner with a way to send less trash to the landfill. Vegetation from the home and yard, food scraps, leaves, coffee grounds and many other organic materials can be composted. By mixing and decomposing, these materials will be turned into fertilizer and humus for use in the garden, flower beds and around trees. No need to buy fertilizer when you can compost.

Septic System: A septic system model is located behind the house. Some homes are not close enough to a sewer system and instead use a septic system to treat wastewater onsite. Failing septic systems can contribute nutrients and pathogens to groundwater and streams and lakes. Proper maintenance and care can help keep septic systems working properly and in turn protect human health and water quality.

Additional fencing has been added to keep people safe. Please do not allow children to play in the stream or the home area for their safety!

Ag and Forestry Area

Ambassadors in this area will talk to visitors about conservation practices in agriculture and forestry, as well as technical assistance that the ICP provides to private land owners. Plan to engage people in conversation about soil and water conservation and the work of the ICP.

Emphasis is on:

- Soil health with cover crop displays around the flag pole area. Crops featured will be Crimson Clover, Radishes and Sorghum Sudan Grass
- **Agriculture and/or forestry:** BMPs at Pathway include: cover crops, waterways, buffer strips, no-till, grass filter strips, forest stand improvement.
- Woodlands areas show how good timber management makes woodlands productive, provides wildlife habitat and protects water and soil quality.

Water History Cabin's Well Pump: This is a great place to engage people in conversation as they enjoy a cup of cool, clear water by the Water History Cabin. Conversations can range from how the water tastes, to well depth, to well water testing and groundwater recharge. Additional water history items are on display. Keep cups replenished and do not allow children to play with the pump.

Soils Area

In the soils area, Ambassadors will talk with visitors about soil characteristics and how soil quality affects the quality of water. Ideally, you will have some basic knowledge of some aspects of soils including:

- Basic soil properties, such as color, texture, structure, soil organic matter and bulk density, and how these properties influence surface runoff and water movement in soils.
- The valuable role soil organisms play in the quality of our soil health.
- The soil survey data and how to access it. The WebSoil Survey (WSS) provides soil data and information. It is produced by the National Cooperative Soil Survey (NCSS) and operated by the USDA NRCS. It provides access to the largest natural resource information system in the world with access to soil maps and data available online for more than 95 percent of our nation. (WSS cards are in the cabin)
- **Soil Health:** Improving soil health is key to long-term, sustainable agricultural production. Soil health is the capacity of a soil to function as a vital, living ecosystem that sustains plants, animals, and humans.
- The Soil Web App is an online soil survey browser used to access USDA-NRCS detailed soil survey data for most of the U.S. on all types of devices. Soils area volunteers are encouraged to download the Soil Web App to demo to fair goers.
- Soils 101 is a short introduction to soils on the NRCS website, from the Web Soil Survey's "Introduction to Soils". Topics are: What is soil?, What is a soil survey?, Careers in Soil Science, and Soil Formation and Classification.
- In the Soils area, Ambassadors can explain the significance of having an official state soil, Miami.

Grazing / Pasture Management Area

In this area, Ambassadors will engage participants in discussions on why well managed pastures can improve animal health and performance, increase profitability and enhance wildlife habitat while protecting water quality. **More information is available online**.

- Stress the importance of maintaining minimum grazing heights and discuss how this relates to plant growth, animal performance and water quality.
- Be prepared to talk about the impact of grazing livestock around water bodies and creeks. Discussion topics include why it is important to restrict livestock access time and provide adequate crossings and access points to reduce sedimentation disturbances that impact water quality.
- The pasture is not mown to simulate a grazed pasture and regrowth.
- The creek is fenced separately, but with access. This is so it can be "flash" grazed to help maintain it but greatly reduce any negative impact on it.

Education Area 2024

Thank you for volunteering for the education area at the Pathway to Water Quality at the Indiana State Fair.
Many of the education activities will be based around this year's theme with additional activities. Detailed instructions will be in the education barn.

- The Colors of Water
- Watershed Map Puzzle
- Mascot Photo Opportunities
- Pollinator Tic-Tac-Toe
- Augmented Reality Sandbox

1) The Colors of Water
   Interactive table to learn about the colors of water found in Indiana.

2) Watershed Map Puzzle
   Put Indiana's watersheds together to build Indiana!

3) Photo Opportunities with Walter Water Drop and Sally Soil

4) Pollinator Tic-Tac-Toe
   Play tic-tac-toe with pollinator stones and then look underneath the stump of the board to see if you can find creatures that live in moist, dark environments!

5) Augmented Reality Sandbox
   Participants will "play in the sandbox" to create a new landscape (topography), and then activate the system to simulate rain and the formation of a watershed!

Soil Health Area 2024

Thank you for volunteering for the Soil Health area of the state fair. This is located between the horse barn and the Pathway to Water Quality (PWQ). This was essentially added to the PWQ exhibit several years ago and includes soil health and urban exhibits. Here are the demonstrations planned for this year's state fair:

1. Raised Bed Gardens—volunteers will explain the various raised garden beds that are on display. Information will be available on how to start, maintain and care for a raised bed among other details. These beds will also have various vegetable plants and cover crops growing in them by state fair time. Garden hoops are also part of this exhibit. This display could be applicable to rural and urban/suburban residents.
2. Compost Demonstration Area-- Do you know that 145 billion meals' worth of food goes to the landfill annually? In the compost demo area we will show fairgoers a few different forms of composting: 3-bin hot composting, and a couple different vermicompost bins (worm bins). Composting not only provides rich amendment for the garden, but also diverts food waste, reducing carbon emissions.
3. Native plantings—we are adding more native plants to the Soil Health Area. Name plates are provided for identification. Native planting supports our native, beneficial insects, who in turn facilitate pollination for our gardens.
4. A rain barrel is also planned to be in the soil health area this year. This will be a good addition to the raised beds to show how homeowners can capture rainwater from roofs to water their gardens and reduce the need for municipal and well water demand.

How Do You Sign Up for Shifts?

Register online! You will find a link to the job descriptions, video, and the online registration link. Remember: Those who volunteer to work a weekend shift (Saturday or Sunday) will receive two (2) admission tickets to the fair.

When signing up, you will need to provide your cell phone number in case there is an emergency before or during the fair where we would need to make contact with you. These numbers are not shared with anyone other than Day Coordinators.

You are responsible for the shift/shifts you sign up for. You will receive a confirmation email when you sign up for a shift. You'll also receive a reminder email a day or two before your shift/s. If you cannot work a shift/s, it is **your responsibility** to find a substitute/s, so have someone in mind before-hand who is willing and able to fill in for you at the last minute (someone from your agency or organization). All volunteers who sign up will receive a complimentary admission ticket and parking pass for the fair.

When you arrive for your shift, check in with the Day Coordinator at the water history cabin located back by the pasture/grazing area near the water pump.

He/she will give you a PWQ badge and/or a T-shirt. This person is your point of contact during your shift. If you need to leave Pathway during your shift, please let the Day Coordinator know.

The water history cabin is air conditioned and is for PWQ volunteers only. This is a place you may store any personal belongings you might bring with you. The cabin is not locked, so do not store any valuables in there. Most of the time, we have several volunteers nearby but they are not responsible for your belongings. There is a refrigerator you can use. Remember to stay hydrated! We have the best water available at the state fair – so bring your water bottle. Wear comfortable shoes, sunscreen and a hat (if you want). Mosquitos can be a problem at times and there is insect repellent spray in the cabin for you to use.

Remember

- If you see something, say something. Report any suspicious behavior or activity to the day coordinator or security.
- Arrive early for your shift (weekends and Two- dollar Tuesdays are extremely busy. It may take 30 to 60 minutes to get into the fairgrounds) and check in with the day coordinator (don't just go to your area). If you are signing up for the first or last shift of the day, please help the day coordinator in setting up or putting away display items.
- If you are unable to make your shift time, it is your responsibility to find a replacement or trade with someone. It is extremely difficult to get last minute volunteers and get them tickets.
- Plan lunch or dinner breaks before or after your shifts.
- **Reminder - again this year -** With your State Fair admission ticket you will receive a parking voucher. Use this to park in Lot 9 or overflow parking in the infield. Please enter through Gate 10 on 42nd Street.
- Restrooms are located nearby PWQ (in the green building) and in the Normandy Barn (large white barn located in Pioneer Village). Please let someone know if you are leaving your area. Day Coordinators will give you a break during your shift.
- Click here for the PWQ Web site

PWQ Demonstrations

Sign up to provide a demonstration! Have a unique soil and water activity? Share it at Pathway to Water Quality!

Note that demonstrations will take place on the demonstration stage in the new Soil Health area (former Boy Scout area) instead of the PWQ bridge.