

# Welcome to Pathway to Water Quality's Volunteer Information

For the 2019 Indiana State Fair-August 2-18, 2019

## 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 2019 Indiana State Fair, contact the PWQ coordinator, Sara Peel, 765-337-9100, [pathwaytowaterquality@gmail.com](mailto: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 fourth year of our Pathway Ambassadors who are to move throughout the exhibit answering questions and interacting with guests. 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 three years' of plant growth on its "green" roof. The green roof captures water and demonstrates conservation to attendees.
- This year's theme is the "[Heroes in the Heartland](#)", so we plan to show visitors how those who protect soil health and water quality can be "heroes" for our natural resources.

## 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 and letter by fair time. [Click here to sign up to be a day coordinator](#)

## 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 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 (PWQ bookmark).
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.

Additional information on all of the practices in the Home Area is available on the [PWQ website](#). 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 [newsletter](#) 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.

Wildlife benefit from the bird feeders scattered throughout the yard. Small birds will enjoy a meal and may become a meal themselves for predators and birds of prey. Bird feeders are a good place to watch, and explain the need for "the circle of life."

**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.



The 2019 Indiana State Fair theme is "**Heroes in the Heartland**", so our goal will be to show how people can be heroes by standing up to protect water quality and other resources. We will relay how actions and activities in a watershed can impact the growing of crops and the management of livestock, as well as how these actions can impact water quality.

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. We also will have live soil health and invasive plant control demonstrations on the bridge on busy days of the fair.
- **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. Live interpreters will be scheduled at the cabin on weekends and other special days to help bring the soil and water conservation message alive to the public. The schedule will be emailed to you.

**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)
- **Indiana Soils Program (NRCS) Helping People Understand Soils and Published Soil Surveys for Indiana**: [This site](#) provides an archive of past and present Soil Surveys and survey publications.
- **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? How does soil form? What are soil horizons? What is a soil scientist? What is a soil survey? Who uses a soil survey? What is a map unit? What is a consociation, complex, association, undifferentiated group or miscellaneous are? What is an Official Series Description?
- 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.](#)

We may have live sheep grazing in this area during your shift. We are not licensed as a petting zoo, so keep children away.



- 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 2019

Thank you for volunteering for the education area at the Pathway to Water Quality at the Indiana State Fair. The 2019 theme for the fair is: "Heroes in the Heartland"

Many of the education activities will be based around this theme with additional activities.

- 1) Soil Tunnel
- 2) Stream Table
- 3) Macroinvertebrate Identification
- 4) Watershed Puzzle
- 5) Photo Opportunities
- 6) Pollinator Tic-Tac-Toe

Detailed instructions will be in the education barn.

### 1) Soil Tunnel

Inflatable soil tunnel with opportunities to view the importance of soil.



### 2) Stream Table

Interactive display showing water movement and erosion along a stream bank.



### 3) Macroinvertebrate Identification



Understand the importance of macros in our rivers and streams and the quality of water.

### 4) Watershed Puzzle

Learn the watersheds of Indiana and how we are all connected.



### 5) Photo Opportunities with Walter Water Drop and Sally Soil.

### 6) Pollinator Tic-Tac-Toe

## How Do You Sign Up for Shifts?

Go to [www.pathwaytowaterquality.org](http://www.pathwaytowaterquality.org). You will find a link to the job descriptions, video, and the [online volunteer registration](#). 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).

If you need to change a shift, simply go back to the online sign up and make the change. All volunteers who sign up by Wednesday, July 1, will receive a complimentary admission ticket to the fair. After that date, we cannot guarantee that the ticket will arrive in time. We will do our best to see that you receive your State Fair ticket (most will go out through inter-department/agency mail).

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 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.
- **Note parking information:** Your State Fair admission ticket **DOES NOT** include parking in the infield. Parking expenses **are not** reimbursed by the Pathway Committee, so please check with your employer about their policy for reimbursement. Volunteers (and employees) can park for free at the 46<sup>th</sup> Street lot with an admission ticket and ride the State Fair shuttle to the fairgrounds. It can take as long as 45 minutes to arrive at the exhibit, so plan plenty of time to get to this lot, park and get to Pathway before your shift. Shuttle service runs to and from the fairgrounds daily, so you will be able to get back to your car by bus. Parking also is available in the State Fair infield for \$5 per car. [A list of additional parking opportunities is available on the state fair website.](#)
- 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

*Details coming soon!*

