FORT WAYNE
CITY UTILITIES

Source Water Protection Practices

For property owners, mineral owners, leaseholders and businesses located in the Honeysuckle Well Head Protection Plan area

Groundwater is a hidden resource, yet it provides drinking water for about half of all Americans. Customers of Fort Wayne City Utilities living in the Honeysuckle addition receive drinking water from wells located near Twin Fawn Trail. As the owner and operator of the Honeysuckle water system, Fort Wayne City Utilities is required to develop and implement a Wellhead Protection Plan (WHPP) to protect the source water for the Honeysuckle system.

Groundwater is stored in aquifers— underground layers of porous rock, sand and gravel. Groundwater makes up about 30% of the earth's freshwater, while rivers, lakes and streams combined make up only about 1%. Just like rivers and streams, it is important to protect groundwater quality.

Even small amounts of chemicals spilled, leaked or dumped can seep into the groundwater and cause groundwater contamination. Preventing pollution from entering the ground water supply is the best and most cost-effective way to protect groundwater resources but it requires the cooperation of everyone who owns property, conducts activities, lives or works in the area. Pollution prevention focuses on awareness, best management practices for storage, use and disposal of possible contaminants, and spill containment and clean-up.

Here are some of the common causes of groundwater contamination with suggestions for what you can do to reduce the chances that your activities will cause groundwater pollution.

Pathways to Pollution

Polluting substances and hazardous materials may reach groundwater as the result of intentional activities as well as accidents such as:

- Chemical and fuel storage, above or below ground
- Tank leaks/spills/overfills
- Loading/off loading areas
- Leaking dumpsters
- On-site septic systems
- Floor cracks
- Seepage through building floors and doorways
- Surface runoff
- Equipment storage
- Improperly sealed floors and walls
- Exhaust fans (with condensation and drips)

Many of these possible sources of groundwater contamination can be managed with the use of secondary containment.

Secondary Containment

The purpose of secondary containment is to trap and block leaks and spills of potential pollutants and hazardous substances so they cannot come into contact with soil and ultimately reach groundwater.

Many sources of information and examples of secondary containment may be found on the internet (see resources

below). The information contained herein provides only a brief overview of a few methods and measures for secondary containment.

Outdoor Secondary Containment

- The structure should be designed and constructed so that it will not collapse or deteriorate. Many secondary containment structures are available commercially.
- The material out of which the containment structure is made should be compatible with the stored material so that a leak will not cause the secondary containment structure to deteriorate.
- The containment structure should be designed and built so that leaks from containers cannot spray beyond the walls of the containment structure.
- For outdoor containment, the secondary structure should be able to hold 100% of the volume of the primary container plus and additional 10% capacity to accommodate precipitation unless the containment area is cover to prevent the entry of rain or snow fall.
- Rain water or snowmelt that accumulates inside a secondary containment structure should be removed with a pump and the discharge should be taken to an approved disposal facility, never pumped out onto the ground.
- Consider covering the containment structure with a pole barn or metal shed to avoid the issue of precipitation accumulating in the containment structure. Be sure runoff from this covering falls outside the containment structure.
- Hazardous material can seep through cracks and joints in the containment structure, so be sure it is effectively sealed or lined.

Secondary containment is also recommended for storage of small amounts of chemicals such as household cleaners, pesticides, fertilizers and automotive chemicals. Chemical storage cabinets are available commercially. In a small operation or garage, secondary containment can be as simple as storing containers of chemicals in a leak-proof plastic bin or on a tray with tall sides.

Other Secondary Containment Resources:

http://water.ky.gov/groundwater/Groundwater%20Protection%20Plans/GWBGPPprevent5.pdf

http://cfpub.epa.gov/safewater/sourcewater/sourcewater.cfm?action=Publications&view=filter&document_type_id=103

Spills/Overfills

Secondary containment is the key to controlling most large-scale leaks that are associated with storage of fuel and chemicals. Small spills may occur particularly when transferring stored materials from one container to another, when fueling vehicles or equipment, or when filling applicators or dispensing devices. Spills should always be cleaned-up using dry methods; spilled material should never be hosed or washed onto the ground. Keep a spill kit close by the location where spills are most likely to occur. In cleaning up spills, use the following four-step process:

- Stop the spill — turn off nozzles or valves, plug puncture-type holes.
- Contain and recover the material — catch flowing liquid using a pan, pail or the nearest thing available. Spread a dry, absorbent material such as kitty litter, sawdust, sand, woodchips or use absorbing pads to soak up the spill.
- Collect the used absorbing material by sweeping it into a bucket, garbage can, barrel or onto plastic sheeting.
- Dispose of the collected material appropriately. This may require that it be taken to a hazardous materials landfill.
- Don't hesitate to call for assistance if the spill if you have any concerns about clean up or if the spill is beyond your capacity to control. In an emergency, call 911. Please also contact Fort Wayne City Utilities by calling 427-6054.

Storage, Use and Disposal of Pesticides

Pesticides and herbicides are used by commercial applicators and agricultural producers to control insects, protect crops, encourage green lawns and to control weeds. Excess rain, or rain shortly after application, may cause these chemicals to be carried by stormwater runoff into water bodies or to percolate into the ground where they may eventually reach groundwater stored in an underground aquifer. Pesticides and herbicides contain a variety of organic and inorganic compounds. They may safely be used as long as manufacturers' storage, usage and application directions are followed.

- Use, Storage and Spill Prevention: Pesticide and herbicide contamination prevention measures involve practices to reduce the potential for these chemicals to be transported into water bodies or into the ground. Pesticides and other lawn chemicals should be stored in their original containers in a shed or other covered structure that is built on am impervious surface such as concrete. Containers — especially those that may be open or may leak — should be stored inside another container that will not leak. This could be as simple as a plastic bucket or bin, or a plastic tray with tall sides. Large-scale storage in above-ground tanks should include secondary containment as outlined above.
- Disposal: Partially full and even empty containers must be disposed of properly. Do not rinse the containers unless you can trap the rinse water and use it immediately. Do not let rinse water go down a drain. Empty plastic and metal containers may be recycled. Homeowners may dispose of partially filled small containers by taking them to the annual Allen County Tox-Away Day. Visit www.acwastewatcher.org for more information. Large containers from commercial applicators are not accepted at Tox-Away Day.
- Spill Cleanup: Promptly sweep up dry material that has been spilled and use the material for its intended purpose. For liquid spills, collect as much of the spilled liquid as possible and use it for its intended purpose. Use cat litter, sawdust or some other absorbent material to soak up the remainder of the spill, then place the material in a sealed plastic bag in the trash. For large spills, call 911 for emergency assistance.

Other Pesticide Storage, Use and Disposal Resources:

EPA Source Water Protection Practices Bulletin: Managing Large-Scale Application of Pesticides to Prevent Contamination of Drinking Water

EPA Source Water Protection Practices Bulletin: Managing Small-Scale Application of Pesticides to Prevent Contamination of Drinking Water

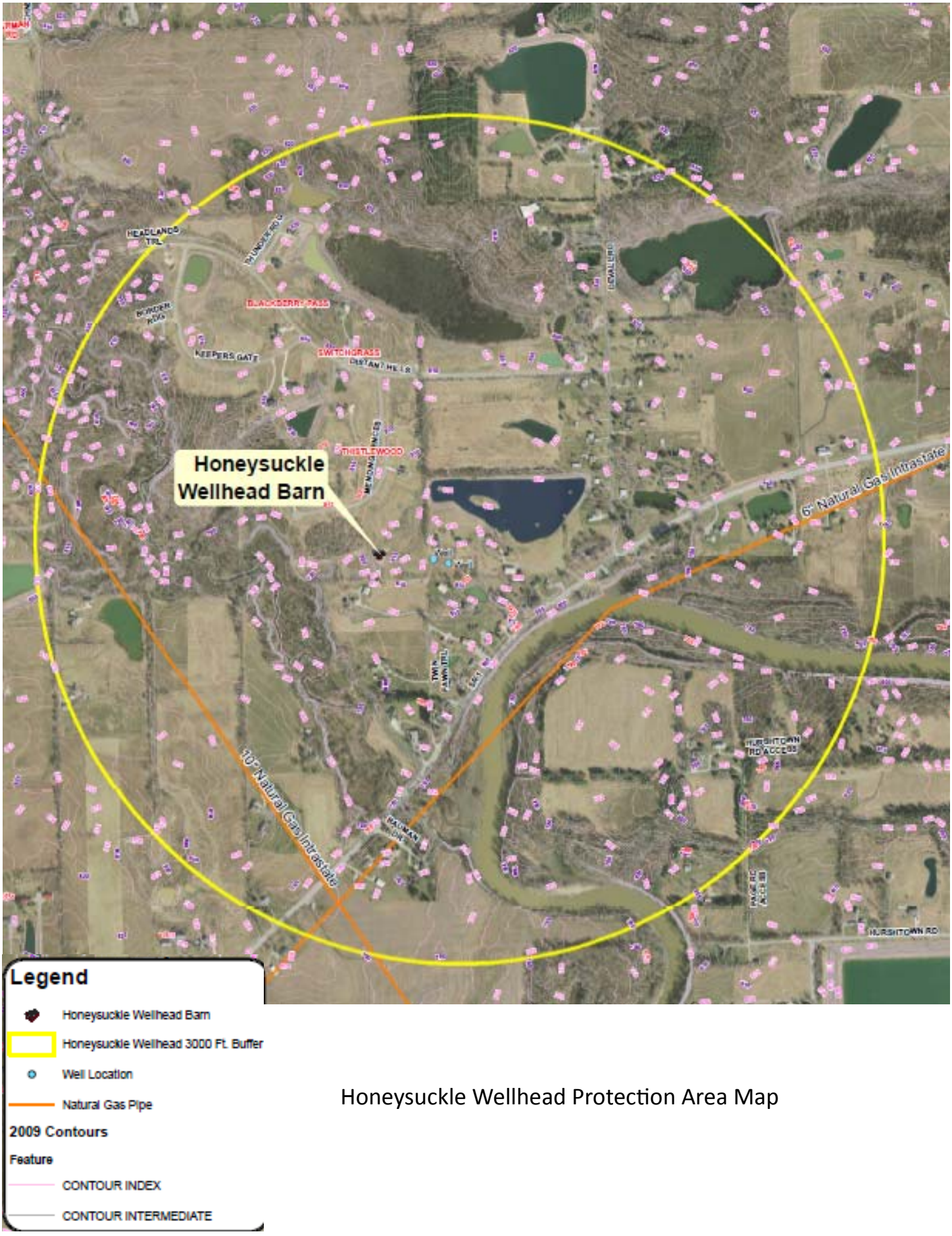
Best Management Practices for Pesticide and Fertilizer Storage and Handling; Colorado State University Extension

Office of Indiana State Chemist, 175 S.. University Street, West Lafayette, Indiana 47907. (765)494-1492. http://oisc.purdue.edu/

Chemicals and Toxic Substances

Protecting ground water requires the appropriate use and proper storage and disposal of chemicals including commercial and domestic cleaning products, automotive fluids, paints, solvents and other chemicals.

- Use, Storage and Spill Prevention: Read and follow label directions for using any chemicals including cleaning products, laundry products, bleach, solvents, paints, swimming pool chemicals, and automotive fluids. Like pesticides and herbicides, any of these chemicals may cause groundwater contamination if they are allowed to flow with stormwater runoff into a water body or if they percolate into the ground and reach an underground aquifer. These chemicals should be stored in their original containers. Secondary containment is advised (storing the containers in a secondary leak-proof container), especially if the original packaging is broken or leaking.
- Disposal: Read and follow label directions for disposal. Empty containers may usually be disposed of in the trash. Empty metal and plastic containers may be recycled. Partially filled containers should be disposed of in a way that will not cause environmental damage. Latex paint can be dried and the dry can may be disposed of in the trash. Check www.acwastewatcher.org for locations that will accept used automotive fluids. Batteries and unwanted electronic devices should also be disposed of appropriately, not sent to a landfill.



Honeysuckle Wellhead Protection Area Map

Septic Systems

Also known as onsite wastewater treatment systems, most septic systems installed today do not have a discharge pipe, or, if they do, the discharge must be monitored and tested to ensure bacterial contamination is minimized. Older septic system may have a pipe that discharges to a stream or other water body. And older systems may not function well, allowing contaminants to leach into the groundwater.

- System Maintenance: If you have an onsite wastewater treatment system, make sure that you have the system tested as required by the Fort Wayne-Allen County Department of Health or that you have the system inspected and cleaned at least every 2 years — annually if you use a garbage disposal — to ensure proper functioning. Never dispose of chemicals through the septic system and don't wash motor oil, grease or other petroleum products down the drain.

Disposal Pits/Dumping

Sometimes in semi-rural areas, property owners will use an existing natural depression or ditch as a dump site. Construction debris, yard waste, paint cans, empty or partially empty containers, liquid waste, automotive fluids, batteries and auto parts — all of these may be found dumped illegally in Allen County. When rain falls on these materials, it may collect bacteria, heavy metals and other toxic substances and carry them into the groundwater system.

- Proper Disposal: Nothing should ever be dumped or piled in a natural depression or in a roadside ditch. Look for ways to reduce, repurpose, reuse, or recycle or appropriately dispose of all waste.

Pharmaceuticals

Pharmaceuticals and personal care products can be introduced into the environment and cause the contamination of groundwater in a number of ways: excretion by human and animals, disposal of unwanted medications by flushing or landfilling, and discharge from on-site wastewater treatment systems.

- Proper Disposal: Human and animal excretion of pharmaceuticals is difficult to control, but proper disposal of unused and unwanted medications can go a long way toward keeping these contaminants out of drinking water supplies. Never flush unneeded or unused medications down the toilet or drain, especially if you have a septic system. Liquid medications may be disposed of in the trash, but it is a good idea to put kitty litter or used coffee grounds in the bottle to soak up some of the liquid, then put duct tape around the cap before putting the bottle in the trash. Allen County TRIAD sponsors two prescription drug take-back events each year — one in April and one in September. Year round drop-off is available at the offices of the Fort Wayne Police Department, Allen County Sheriff's Department, New Haven Police Department and Indiana State Police Post in Fort Wayne.

Stormwater Runoff

Anything that has the potential to pollute the runoff that occurs during and after a rain storm or snowmelt also has the potential to contaminate groundwater.

- Stormwater Quality Management: Everyone can help prevent stormwater runoff pollution by picking up after pets, storing and disposing of chemicals properly, repairing automotive leaks, composting yard waste, using fertilizers and pesticides sparingly, and sweeping driveways and sidewalks instead of using the hose.
- Changes in Land Use: If you become aware of changes in land use for any properties in your area, and you think there may be a potential impact to groundwater quality, please notify Fort Wayne City Utilities.
- Other sources for information on keeping stormwater runoff clean include the Allen County Surveyor's office; the Allen County Partnership for Water Quality; and the St. Joseph River Watershed Initiative.

The Honeysuckle Water System

The drinking water system that provides water to homes in the Honeysuckle Addition is owned, operated and maintained by Fort Wayne City Utilities. The Honeysuckle system consists of drinking water wells, a small water treatment system and the pipes and appurtenances that make water available to the homes in the addition. The Honeysuckle system is not connected to the drinking water system that serves customers if Fort Wayne and draws water from the St. Joseph River.

The source of water for customers of the Honeysuckle system is groundwater wells. While City Utilities is ultimately responsible for ensuring that the water in the Honeysuckle system is safe and meets (or is better than) all water quality standards require, the users of the system and the surrounding community are encouraged to share those responsibilities by helping to protect the quality of the groundwater source. The best way to help protect the water supply is through local community involvement.

Wellhead Protection Planning

Wellhead protection is a community-based process that allows customers of the Honeysuckle system and property owners, leaseholders and businesses in the area to help protect the Honeysuckle water source. A wellhead protection program (WHPP) is intended to protect the area nearest the drinking water supply wells from potential hazards. Contamination in the wellhead area could affect the water supply years into the future.

Because protecting groundwater is so important, Indiana requires that all community water suppliers using ground water develop and implement a wellhead protection plan with members of the local community. The Honeysuckle Wellhead Protection Plan includes five phases: Delineation; Contaminant Source Inventory; Management; Contingency Planning; and Public Education.

Spill Reporting

The Honeysuckle Wellhead Protection Area consists of a buffer area within a 3,000 foot radius in all directions from the Honeysuckle water plant located at 16811 Twin Fawn Trail near Leo-Cedarville Indiana.

To report a spill of any type that could pose a threat to groundwater quality in the Honeysuckle Wellhead Protection Area, please call 911 and also (260) 427-6054.

How to Contact Fort Wayne City Utilities

Local Planning Team Contact:

Brandi Wallace, Program Manager
brandi.wallace@cityoffortwayne.org
(260) 427-5582

For issues related to City Utilities billing:

Customer Relations Department
(260) 427-1234

For issues related to water quality or pressure:

(260) 427-8311 or 311