

Information About Rain Barrels from the City of Fort Wayne

Rain barrels are containers placed at the end of roof downspouts to capture and store roof runoff for uses such as irrigation of landscaping. Rain barrels are not just storage devices. The water collected in the rain barrel must be used and the barrel must be maintained on a periodic basis. Common sizes for residential rain barrels are 55 and 90 gallons. There are a variety of sources for prefabricated rain barrels. Kits are also available that let you adapt an existing barrel to use for rain water harvesting.



While rain barrels can be effective for rain water harvesting, they may also create issues if they become a breeding ground for mosquitoes or if they overflow and cause property damage or flooding. This guide from Fort Wayne City Utilities is intended to help you avoid some common problems associated with rain barrels. By following some common sense practices and precautions you can

- Stay in compliance with City codes and policies;
- Reduce the chance of causing property damage or injury when installing and using a rain barrel;
- Avoid issues that might cause your neighbors to complain about your rain barrel.

Benefits

Using rain barrels to temporarily store and reuse rain water reduces runoff from your property and can help to slow down the water that does run off. Rain barrels conserve non-potable water. By using water from a rain barrel to irrigate landscaping you may be able to reduce your water bill. Rain barrels can be inexpensive, easy to maintain and may help to reduced drainage problems if they are installed correctly.

How soon will your barrel full up? It depends on the amount of roof area draining into the barrel and the amount of rain that falls. During a one inch rainfall, 100 square feet of roof surface can produce over 50 gallons of water. This would nearly fill a 55 gallon rain barrel.

What to look for in a rain barrel

All rain barrels must have a cover that can be sealed and have overflow points. If not properly sealed, your rain barrel can become a breeding place for mosquitoes. If this is reported to Fort Wayne's Department of Neighborhood Code Enforcement or to the Fort Wayne-Allen County Department of Health and an investigator finds a problem, you may be ordered to clean or even to remove the barrel. Don't let your rain barrel become a nuisance to your neighbors.

A typical residential rain barrel design includes an opening in the sealed lid to accept flow from a downspout. The best designs allow the downspout to go all the way into the barrel. Models with a screened opening in the lid may not function if the screen becomes covered and clogged with debris.

The barrel should have an overflow pipe so that water is diverted when the barrel is full. Some models have an overflow that can be connected to other barrels so that several will be filled in sequence when the first is full. See below for tips on locating the barrel and routing the overflow so that if the barrel gets too full, it will not cause flooding.

A spigot located near the bottom of the barrel lets you attach a hose to use water collected in the barrel for irrigation. It also allows the barrel to be emptied for maintenance.

Installation

Locate the rain barrel on a flat surface next to or near a downspout. If you live in a subdivision, check your neighborhood association covenants for any restrictions that would affect where you place the barrel. The barrel may be elevated on a small platform to improve flow from the spigot. Remember, a completely filled rain barrel can weigh as much as 500 pounds. Any platform intended to hold a rain barrel should be flat and sturdy and should be made of material strong enough to support the barrel when it is full.



The barrel must have an overflow or a way to stop more water from going into the barrel when it is full. Any overflow from the barrel should be directed away from the house. A good rule of thumb is to discharge water at least 6-feet from a structure's basement and 2-feet from a crawl space or slab foundation. Directing the water away from the barrel is the only way to ensure that overflow from the downspout and barrel will not cause basement flooding or structural damage. You should not allow rain water to simply overflow from the barrel and pool around the base of the barrel as this can cause flooding or damage to your building foundation. A rain garden is a good place to route the overflow water from your rain barrel.

Property lines: Overflow from your rain barrel should not be directed so that it flows onto a neighboring property. The overflow should be directed so that it stays within one (1) foot of your property line.

Access: Avoid routing the overflow from the barrel across a walkway, patio or driveway. The water can freeze in the winter and create an ice hazard.

Slope: You may need to add or remove soil to make sure that the slope of the ground allows water to flow away from the barrel.

Other concerns: Do not direct overflow water from the rain barrel to the area over a septic drain field or an underground oil tank unless they have been decommissioned. Do not discharge overflow within ten feet of a retaining wall.



Caution – Warning During Installation and Set Up



Installation Hazards – Rain barrels are for rain water collection and outdoor use only. No other uses are recommended. Downspout edges may be sharp so wear protective gloves when cutting downspouts and connecting them to your rain barrel to avoid cuts and scratches. Always wear safety glasses when cutting or drilling to prevent eye injuries. Protect your home's siding with a sheet of plywood inserted between the downspout and the siding to prevent damage.

Electrical Hazard – If downspouts contain or are connected to heating cables or electrical wires, there is a potential electrocution or fire hazard during installation. Make sure any electrical cables are removed or move out of the way before cutting the downspout.

Tipping Hazard – If not properly set up, accidental tipping of the rain barrel may occur causing personal injury or property damage. The location where the rain barrel will be placed must be level and provide solid support. Do not place the barrel on a surface that is not flat and even. Always use a solid surface under the rain barrel.



Avoiding Mosquitoes

Mosquitoes thrive in water that has been standing still for a period of time, so a rain barrel is an ideal breeding location. Mosquitoes can also penetrate the smallest holes, so you will need to be sure that all openings to your rain barrel are properly screened to keep mosquitoes out. Manufactured rain barrels usually come with a cover or screen to seal the barrel opening. If you are building your own rain barrel, remember that the area around the opening, around the spigot and around the overflow will need to be sealed or screened to keep mosquitoes out.

- Keep the rain barrel lid sealed;
- Keep the inside of the barrel clean and free of organic material.
- During the rainy season, water may stand on the top of your rain barrel. Use your hand to splash water off the top of the barrel every 3 – 4 days.



If you find mosquitoes in your rain barrel, empty the barrel completely and allow the inside to dry. This should kill any mosquito larvae.

Chemical larvicides can be added to your rain barrel to kill and prevent mosquito eggs and larvae. Mosquito dunks or donuts are available at hardware and garden stores. Dunks are frequently used in rain barrels, but people who want to use the rain water on vegetable gardens or fruit trees often avoid them.

Maintenance

If you have a plastic rain barrel and you don't like the color, you may want to paint it with a special paint such as Krylon Fusion that is made especially for painting plastic with not priming needed. When selecting a color for the barrel please be a good neighbor and consider how your neighbors may feel about your choice. This may help you avoid problems later on. Another idea is to place plantings around your rain barrel to help it blend into your landscaping.

When regularly maintained, a rain barrel and its components can have a lifespan of about 20 years!

Inspect your rain barrel periodically for leaks especially at the spigot and at all connection points. Make sure that leaves and other debris from the roof do not clog the system. Screen all vents and other open spaces in the barrel to prevent mosquitoes from entering the barrel and breeding.

- Keep the rain barrel spigot closed when you are not using the water so that the barrel will collect water. When the barrel is full, water will flow out the overflow.
- Regularly check your gutters, downspouts, rain barrel intake and spigot to be sure they have not become clogged. Keeping your gutters clean will help keep "gunk" from building up in the bottom of your rain barrel.

For maximum stormwater management benefits, empty the barrel at least weekly and also between rain events in the wet season. Clean the inside of the barrel annually by emptying it, opening it and brushing the inside or washing it with a mild disinfectant such as vinegar or another non-toxic cleaner. The washout can be disposed of in a sanitary sewer or to a vegetated area if the disinfecting agent is dilute enough so it will not harm plants.

If you are using a plastic rain barrel, you will need to protect your rain barrel in the winter to avoid having it freeze. The best way to do this is to disconnect it, empty the barrel and store it indoors. If it must be left outside, store it upside down. Depending on how the downspout has been connected to the rain barrel, the downspout will now discharge winter rain or snowmelt directly onto the ground, possibly very close to your foundation. It is a good idea to put a downspout extender on the end of the downspout to route the discharge away from the building.



Safety Considerations and Precautions During Use



Drowning Hazard – Children should never be allowed to play on or near or to climb on or open the rain barrel. The following steps should be taken to avoid accidental drowning:

- Keep the rain barrel cover (if there is a removable lid) securely attached and closed.
- If the barrel cover is cracked, warped, broken or damaged, empty the rain barrel and do not use it until the cover can be replaced and the barrel can be securely closed.
- Do not place the rain barrel near a deck, stairs chairs or other items that would allow a child to climb onto or into the barrel.

Water Contamination Hazard – Drinking water from a rain barrel may cause serious illness. Use water from the rain barrel for non-potable uses only.

- DO NOT let people or animals drink water from a rain barrel.
- Use rain barrel water only for water plants or outdoor landscaping.
- DO NOT use water from the barrel for cooking, washing or in any way that might result in someone swallowing the water.
- Empty and clean the barrel regularly so that the water inside does not become stagnant.



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With proper installation, maintenance and use, a rain barrel should function properly. The City of Fort Wayne and Fort Wayne City Utilities assume no liability for the installation, maintenance or use of your rain barrel. We are not responsible for any rain barrel misuse, malfunction, property damage, injury or illness associated with your rain barrel, its accessories or its contents.