Storm Water

Storm Water Runoff ... occurs during rainfall events or snow melt, causing 1000s of gallons of storm



water to enter the City of Belpre's storm drain system. The storm drain system is made up of catch basins, pipes, ditches, and small streams in route to one of the following named streams: Ohio River; Congress Run, or Davis Creek.

Along the way ... the runoff has a potential of becoming polluted when passing over lawns, construction sites, and impervious areas such as streets, sidewalks, and parking lots. When passing over these surfaces, *storm water* can become polluted from trash, leaked automotive fluids, pet waste, lawn debris, and soil. And, since storm water is untreated, it has a potential to pass this pollution to our streams and rivers, where it can adversely affect aquatic life, and can potentially affect drinking water supplies.

The Solution

Preventing Storm Water Pollution

Scroll down to access italicized references.

- Never dump anything down storm drains, properly dispose of wastes. See Disposal / Recycle
- Keep lawn debris from entering storm drains. See Lawn Care
- Use pesticides & fertilizers sparingly. See Lawn Care
- Use salt sparingly on roads & sidewalks. See Lawn Care
- Vegetate or mulch exposed soil. See Lawn Care See Construction Sites
- **♦ Keep soil from leaving construction sites.** See Construction Sites
- Direct downspouts away from paved surfaces to "green areas". See Landscaping
- Wash your personal vehicle at a commercial car wash, or your lawn. See Auto / Equipment
- Wash your commercial vehicles & equipment where wash water is treated. See Auto / Equipment
- **♦ Check vehicles for leaks.** See Auto / Equipment
- Have your septic tank pumped and system inspected regularly. See Septic System
- ▶ Pick up your pet's waste. Scoop, Bag and Trash it. See Pet Waste
- Manage business property and procedures to reduce storm water pollution. See Commercial Property.
- Volunteer with local organizations for clean-up, tree planting, and landscaping activities. See Volunteering
- The City of Belpre has adopted a Storm Water Management Plan. The plan addresses ongoing efforts to keep storm water clean. A report of these efforts is compiled annually. For copies: Check the Belpre Storm Water Management Plan and the Belpre 2017 Annual Storm Water Report links listed under the "Storm Water Runoff" section of the Public Works Department. Copies are also available from Kathy Davis @ 740-885-3312, kathy.davis@oh.nacdnet.net.



Lawn Care

Excess fertilizers & pesticides applied to lawns and gardens wash off and pollute streams. In addition, yard clippings and leaves can wash into storm drains and contribute nutrients and organic matter to streams. Exposed soil can erode causing sediment to plug drains and pollute streams.



- Don't overwater the lawn. Consider using a soaker hose instead of a sprinkler.
- Use pesticides & fertilizers sparingly. When necessary use only in the manufacturer's recommended amounts.
- Don't leave lawn debris on the street or sweep it into storm drains. Blow or sweep back onto the lawn or compost for later use.
- The City of Belpre Streets crew sweep streets on a routing basis.
 Grass clipping can clog the sweeper adding to additional time and expense. Please keep grass clippings out of the street.



- Vegetate bare areas as soon as possible. Cover or mulch piles of soil being used in landscaping projects.
- ♦ For more information: Check the <u>Backyard Conservation</u> and the <u>Mowing Belpre</u> links listed under the "Storm Water Runoff" section of the Public Works Department. Copies may also be found at the Belpre City Building or by contacting Kathy Davis @ 740-885-3312, kathy.davis@oh.nacdnet.net.

Auto / Equipment Care

Washing your car and degreasing parts can send detergents and other contaminants through the storm drain system. Dumping automotive fluids into storm drains has the same result as dumping the materials directly into a waterbody.



- For personal vehicles, use a commercial car wash that treats or recycles its wastewater, or wash your car on the lawn so water will infiltrate into the ground.
- For commercial vehicles, use a commercial car wash that treats or recycles its wastewater, or inside at your place of business where waste water is treated.
- Repair leaks. Clean spills with an absorbent, such as kitty litter, and dispose to solid waste. Never hose down a spill.
- Dispose of used auto fluids & batteries at designated drop-off recycling locations.
- For more information: Check the <u>Car Washing in Belpre</u> and the <u>Recycle Disposal List</u> links listed under the "Storm Water Runoff" section of the Public Works Department. Copies may also be found at the Belpre City Building or by contacting Kathy Davis @ 740-885-3312, kathy.davis@oh.nacdnet.net.

Septic Systems

While most of the City of Belpre's waste is gathered and treated at the City Waste Water Treatment Plant, there are still some private septic systems in the City. Known as HSTSs (Home Sewage Treatment Systems), leaking and poorly maintained systems release nutrients and pathogens (bacteria and viruses) that can be picked up by storm water, discharged into nearby waterbodies, and cause public health problems and environmental concerns.



- Don't dispose of household hazardous waste in sinks or toilets.
- Inspect your system regularly & have your tank pumped as necessary.
- Keep records of maintenance for future reference.
- ♦ Call the City of Marietta / Belpre Health Department Environmental Division for more information. 740-373-0611 x 2303.
- ♦ For more information: Check the <u>Septic System Maintenance Manual</u> link listed under the "Storm Water Runoff" section of the Public Works Department. Copies may also be found at the Belpre City Building or by contacting Kathy Davis @ 740-885-3312, kathy.davis@oh.nacdnet.net.

Pet Waste

With over 500 licensed dogs in the City of Belpre contributing an average of ½ lb. per day of waste, the need to control disposal is important to the health of residents. Leaving it on the ground increases public health risks by allowing bacteria and nutrients to affect humans or to wash through the storm drain system to local streams. Composting will not generate enough heat to kill the pathogens. Septic tanks or the City municipal waste system were not designed to treat this waste.

- Don't discard pet waste on the ground, in a compost, or in a storm drain.
- Bag & place it into your household trash.
- Report violations
 - o For private or public property call the Health Dept. @ 740-373-0611 x 2303
- Scoop It, Bag It, Trash It
- ♦ For more information: Check the <u>Pet Waste Management</u> link listed under the "Storm Water Runoff" section of the Public Works Department. Copies may also be found at the Belpre City Building or by contacting Kathy Davis @ 740-885-3312, kathy.davis@oh.nacdnet.net.



Commercial Property

Dirt, oil, and debris that collect in parking lots and paved areas can be washed into the storm drain system and eventually enter local streams. Waste exposed to storm water can contaminate runoff. Wash water from autos and equipment can wash into drains and contaminate streams. Excessive use of salt on roads, sidewalks, and parking lots can wash off with storm water runoff contaminating streams and killing vegetation.



- Sweep up litter and debris from sidewalks, driveways & parking lots, especially around storm drains.
- Do not hose down spills or debris into the storm drain. Sweep up or absorb with an absorbent, such as kitty litter, and dispose to solid waste.
- Keep dumpster lids and garbage cans covered at all times or store waste in plastic garbage bags.
- Use a commercial car wash that treats or recycles its wastewater, or inside at your place of business where waste water is treated.
- Use salt sparingly on roads, parking lots, and sidewalks.

Disposal / Recycle

Washington County.

Handling and disposing of waste properly can help to prevent storm water contamination. In many cases, our waste is just a resource in the wrong place and can be recycled at little or no cost to the consumer. The City of Belpre has contracted for solid waste collection at homes and businesses. This service also provides curb side recycling. In addition, special collections and numerous additional locations are available for recycling options. Used motor oil or other automotive fluids, yard waste, hazardous household items, leftover paint, large appliances, TVs, computers, tires, and leaves are common items handled by special collections or one of numerous locations in

- Never dump anything down storm drains or in a stream.
- Use trash & curb side recycling in Belpre. Contact the City of Belpre for securing service at 740-423-7592.
- Drain or soak up liquids with an absorbent or kitty litter before placing with solid waste. Liquids can escape during collection or transit.
- ♦ Recycle through Special Collections. See http://wasteabate.org/special-collections/ for current dates in Washington County.
- Use various recycle & disposal options in Washington County.
- ◆ For more information: Check the <u>Recycle Disposal List</u> and <u>Storm Drain Marker</u> links listed under the "Storm Water Runoff" section of the Public Works Department. Copies may also be found at the Belpre City Building or by contacting Kathy Davis @ 740-885-3312, kathy.davis@oh.nacdnet.net.

Construction Sites

Erosion controls that aren't maintained can cause excessive amount of sediment and debris to be carried into the storm water system.

Construction vehicles can leak fuel, oil, and other harmful fluids that can be picked up by storm water and deposited into local waterbodies. The City of Belpre and the Ohio Environmental Protection Agency both have a permitting process for certain construction activities. In both cases a permit requires a Storm Water Pollution Prevention Plan known as SWP3.



- Divert storm water away from disturbed or exposed areas of the construction site.
- Install silt fences or filter socks, vehicle mud removal areas, vegetative cover, and other sediment & erosion controls & properly maintain them, especially after rain events.
- Prevent soil erosion by minimizing disturbed areas during construction projects, and seed & mulch bare areas as soon as possible.
- Control storm water after construction is completed by following guidelines in the Rainwater Land Development Manual. See http://epa.ohio.gov/dsw/storm/technical_guidance.aspx
- Check equipment & storage areas regularly for leaks and exposure to storm water.
- Secure waste in a covered dumpster.
- Consult with City of Belpre Code Enforcement for permitting requirements prior to disturbing ground. Allow 30 days for permitting review. 740-423-7592
- ♦ Consult with Ohio Environmental Protection Agency permitting requirements prior to disturbing ground. Allow 21 days for permitting review. See http://www.epa.state.oh.us/dsw/storm/index.aspx
- ♦ For additional information on Best Management Practices that can be used on a construction site for during or after construction: Refer to the Rainwater Land Development Manual at http://epa.ohio.gov/dsw/storm/technical_guidance.aspx You may also view the Rainwater Land Development Manual at the Washington Soil & Water Conservation District office. To make arrangements: call 740-885-3312.
- ◆ For assistance with preparing a Storm Water Pollution Prevention Plan (SWP3): Check the <u>SWP3 Providers</u> link listed under the "Storm Water Runoff" section of the Public Works Department. Copies may also be found at the Belpre City Building or by contacting Kathy Davis @ 740-885-3312, kathy.davis@oh.nacdnet.

Landscaping

Landscaping practices can be used on both residential and commercial properties to control storm water, reducing erosion and treating runoff. Consider directing downspouts away from impervious (solid surface) areas to green areas such as:

♦ Permeable Pavement – traditional concrete and asphalt don't allow water to soak into the ground. Instead these surfaces rely on storm drains to divert unwanted water. Permeable pavement systems allow rain and snowmelt to soak

through, decreasing storm water runoff.

Rain Barrels – You can collect rainwater from rooftops in mosquito-proof containers. The water can be used later on lawn or garden areas.

- Vegetated Filter Strips Filter strips are areas of native grass or plants created along roadways or streams. They trap the pollutants storm water picks up as it flows across driveways and streets.
- Rain Gardens & Grassy Swales Specially designed areas planted with native plants can provide natural places for rain water to collect and soak into the ground. Rain from rooftop areas or paved areas can be diverted into these areas rather than into storm drains.
- Post Construction Practices Permanent practices put into place at a construction site that require additional controls to treat and release storm water.
 See Rainwater Land Development Manual at http://epa.ohio.gov/dsw/storm/technical_guidance.aspx



- ◆ Trees Trees added to any landscape can improve the quality of storm water runoff by absorbing and assimilating pollutants. A mature Maple can absorb up to 800 gallons of water daily. In addition, strategically placed, trees can offer shade in the summer, and block cold winter wind while adding property value to our homes. The City of Belpre is a Tree City USA with an active Tree Commission. For suggested plantings, contact the tree commission by calling 740-423-7592 for a referral.
- ♦ For more information: Check the <u>Rain Garden</u> and <u>Rain Barrel</u> links listed under the "Storm Water Runoff" section of the Public Works Department. Look over a "Rain Garden Manual" at www.ohioprairienursery.com/resources/rain-garden-manual. Copies may also be found at the Belpre City Building or by contacting Kathy Davis @ 740-885-3312, kathy.davis@oh.nacdnet.net.

Volunteering

Volunteers can make all the difference in the quality of life in any community. Many residents take part in community clean up days, landscaping maintenance, and tree plantings. To volunteer as an individual or an organization please contact:

- ♦ Belpre in Bloom Contact the City of Belpre at 740-423-7592 for a current contact.
- City of Belpre Tree Commission Contact the City of Belpre at 740-423-7592 for a current contact.
- ♦ Washington Soil and Water Conservation District Call 740-885-3325 for opportunities.