

# 2020 STORMWATER CALENDAR

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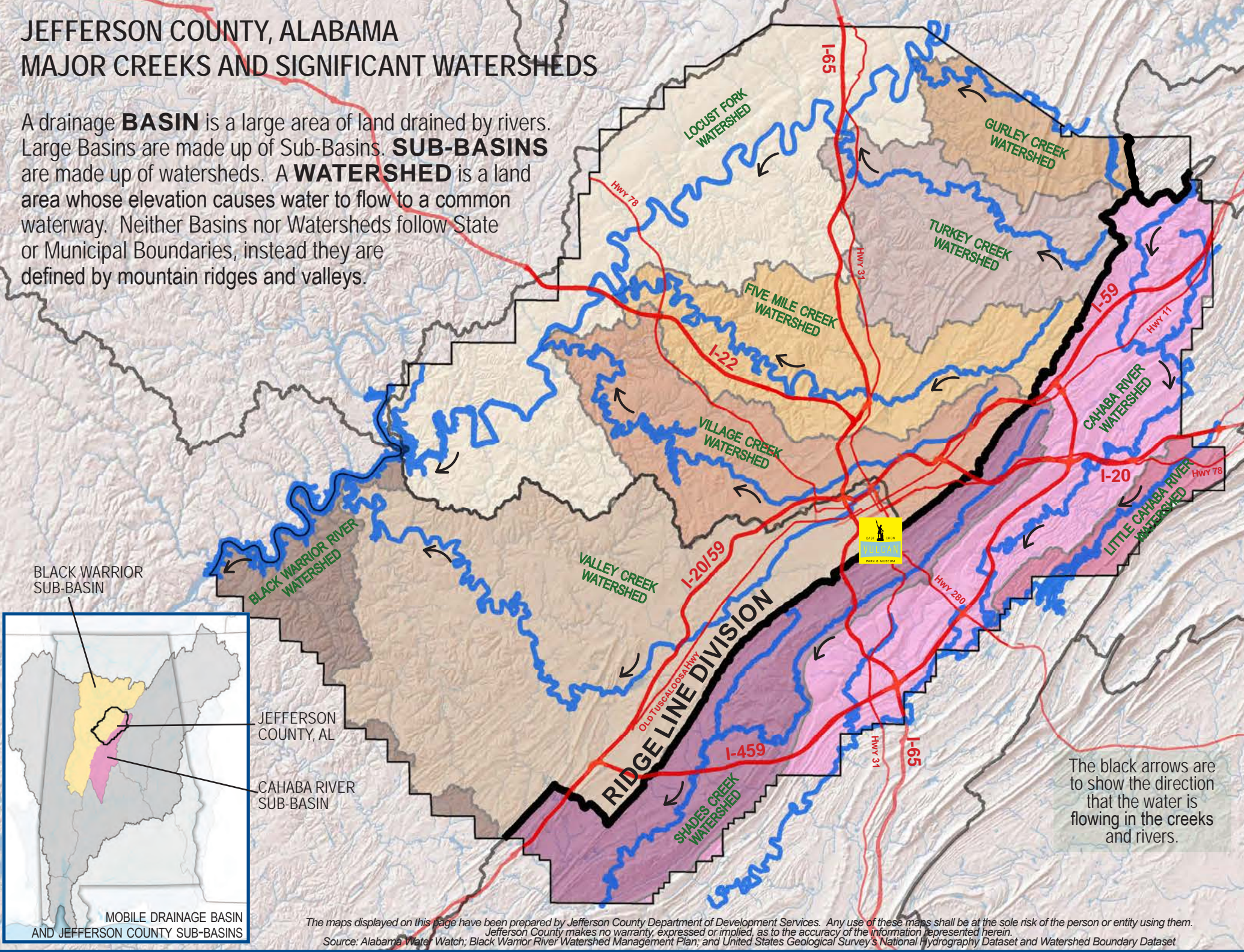


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# JEFFERSON COUNTY, ALABAMA MAJOR CREEKS AND SIGNIFICANT WATERSHEDS

A drainage **BASIN** is a large area of land drained by rivers. Large Basins are made up of Sub-Basins. **SUB-BASINS** are made up of watersheds. A **WATERSHED** is a land area whose elevation causes water to flow to a common waterway. Neither Basins nor Watersheds follow State or Municipal Boundaries, instead they are defined by mountain ridges and valleys.



The black arrows are to show the direction that the water is flowing in the creeks and rivers.

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## 2020 Stormwater Calendar Overview and Highlights

Alabama is the beautiful when you see the plant and animal diversity we have in our state. We are blessed with an average annual rainfall of 55 inches a year and have nearly 10% of the freshwater in the continental United States that starts in or flows through our borders. Having (and keeping) our waterways clean is super important to our economy, our health and wildlife. Yet with development over the last 50 years, we have built more and more roads, homes, and businesses. These changes to the natural environment have resulted in large amounts of rainwater moving very quickly across hard surfaces, through the stormwater drainage system, and into waterbodies. Fast moving stormwater that used to filter into the soil can pick up many pollutants from the ground including motor oil, fertilizers, pesticides, heavy metals, eroded soil, sewage, pet waste, and litter. Large amounts of fast moving stormwater can overwhelm drainage systems. When this occurs, streets flood and stream banks erode.

The 2020 Stormwater Calendar features Low Impact Development (LID) / Green Infrastructure (GI) Practices that assist with the reduction of stormwater leaving a site during a rain event. Each month, a LID / GI practice has been highlighted in either a commercial (large scale) or in a residential (small scale) setting. These practices emphasize water conservation and the use of various features to collect, store and filter the rain into the ground to prevent runoff. We hope that this calendar will encourage you to install or implement some of these LID / GI practices.

**Below are LID / GI techniques that you can use yourself that help to reduce the volume and velocity of stormwater runoff as well as protect our local creeks and streams from pollution.**



Rain barrels collect roof runoff



Ponds collect and hold runoff



Rain gardens collect and hold runoff



Redirect roof runoff to landscaped areas



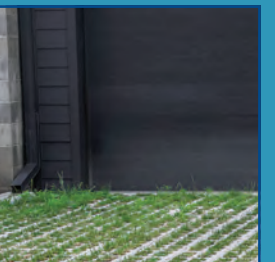
Natural areas help reduce runoff



Planter boxes collect and hold runoff



Compost improves soil's water retention



Pervious pavers collect and hold runoff

## Exactly where does the rainwater go after it falls on your roof?



Next time it rains, grab an umbrella and take a walk. Watch where the rain goes. Does it soak into the ground from your downspout? Does it run down your driveway into the street? From the street, does it enter a storm drain or open ditch? Does the ditch drain into an open channel? Have you ever seen rain washing from an open pipe (outfall) into a local creek or stream? Most people have never taken the time to find out where their rainwater goes after it falls on their roof, yet stormwater runoff is the largest threat to our nation's waterways.

### Resources

Information gathered for this project came from Alabama Cooperative Extension System; Alabama Smart Yards; Alabama Water Watch; Carolina Clear and Carolina Yards; Clemson Cooperative Extension; and the United States Environmental Protection Agency Soak up the Rain.

### The Photographer



Hank Siegel, a retired Department of Defense Official, has lived in the Birmingham area since 1992. He offered his time, his passion, and his photography skills to provide photos for this calendar. He was enthusiastic and energetic from the beginning of this project, and we greatly appreciate him sharing his expertise with Jefferson County residents by capturing the beautiful scenes included in this calendar.



# STREAMSIDE BUFFERS

## Freshwater Land Trust, Turkey Creek Pinson, AL

In a small watershed in northwest Jefferson County lives the Vermilion Darter - a tiny, vibrantly colored fish found nowhere else on earth. The fish inhabits what is now a 9 mile stretch of Turkey Creek. The Vermilion Darter was listed as a critically endangered species in 2001 because of a dam built in the 1920s that made it impossible for the darters to move through a segment of the creek. The dam also caused portions of the creek to fill with silt, degrading the habitat downstream and threatening the only known spawning site for the fish. The dam was removed and to protect the now free-flowing stream, native plants were introduced to ensure soil stayed on the creek's banks instead of washing into its waters. Protecting water quality through streamside land acquisition and planting vegetation to stabilize the stream banks helped preserve this critical habitat for the Vermilion Darter. In addition, the enhancements made to Turkey Creek also improved the quality of habitat for all creatures throughout the Turkey Creek watershed and northwest Jefferson County.

*Photo, Freshwater Land Trust*

Streamside buffers are vegetated areas along streams and other aquatic systems. They decrease pollution, control erosion and provide wildlife habitat.



To report a sanitary sewer overflow call 205-942-0681.

Within unincorporated Jefferson County call 205-325-5792 to report suspected water pollution; call 205-582-6555 to report illegal dumping. Within the City of Birmingham, call 311. For all other municipalities, call your local city hall.

# JANUARY 2020

**STORMWATER TIP:  
Properly maintain your  
vehicles and lawn  
equipment.**

If just one drop of oil leaked from each vehicle in Jefferson County, it would pollute 16 million gallons of water! That is enough water to fill 24 olympic sized swimming pools.

Oil and other vehicle fluids pollute our creeks and rivers.

Please use cat litter to soak up spills; sweep up and dispose of in the trash.

Please wash vehicles on grassy or gravel areas rather than in your driveway or on the street.

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
			1 New Year's Day	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20 Martin Luther King Jr. Day	21	22	23	24	25
26	27	28	29	30	31	
			<b>SPECIAL EVENTS:</b> Remember this month is the Salamander Festival! Recycle your Christmas trees at the Birmingham Zoo. More information is available at <a href="http://www.birminghamzoo.com">www.birminghamzoo.com</a> .			





# STORMWATER RETENTION POND



**Birmingham-Southern College  
Urban Environmental Park**  
(900 Arkadelphia Road, 35204)

Retention ponds (wet ponds) are stormwater control structures that provide containment and treatment of contaminated stormwater runoff. Water is diverted to a retention pond by a network of underground pipes connecting storm drains to the pond. The system allows for large amounts of water to enter the pond, and the outlet lets out small amounts of water as needed to maintain the desired water level. By capturing and holding the stormwater runoff, retention ponds control stormwater quantity and improve quality. The natural processes that occur in the pond give contaminants and sediment the opportunity to settle out while the water slowly soaks into the ground, evaporates, or is taken up by plants. Retention ponds should be surrounded by natural vegetation to improve bank stability and enhance appearance.

*Photo, Hank Siegel*

Retention ponds control runoff by collecting and storing stormwater. The water evaporates or is taken up by plants.



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# FEBRUARY 2020

**STORMWATER TIP:  
Properly transport and  
dispose of trash and  
recyclable materials!**

Trash that falls out or blows out of vehicles or trailers becomes litter.

Litter pollutes our creeks and rivers. Prevent litter by securing all items before driving and please do not toss anything out of automobile windows.

Visit [recycleAL.org](http://recycleAL.org) to find facilities that will accept hard to dispose of items.

Coordinate or participate in a volunteer roadside litter cleanup. Call 325-8741 to learn more.

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
						1
2 Groundhog Day	3	4	5	6	7	8
9	10	11	12	13	14 Valentine's Day	15
16	17 Presidents' Day	18	19	20	21	22
23	24	25	26	27	28	29
			<b>SPECIAL EVENTS:</b> Register your community to participate in the Spring Cleanup through the Alabama People Against a Littered State. Call 325-8741 for more information.			





# RAIN GARDENS



## Ruffner Mountain Habitat Demo Garden

(1214 81st Street South, 35206)

The rain garden located in the Habitat Demonstration Garden at Ruffner Mountain was created by Ruffner to be used to detain stormwater. It is planted to be most beneficial to the rainwater it receives, allowing the water to seep into the earth naturally. It also is used as a demonstration site to show visitors how to detain stormwater in a natural way while also benefitting local plants and a variety of animals. The rain garden captures rainwater to prevent it from leaving the site and potentially causing erosion and sedimentation. The native plants installed in and around the garden act as buffers to stabilize the soils and help filter out the pollutants carried by rainwater. The native plants also support wildlife by providing food and shelter for a variety of animals including birds, bees, butterflies and dragonflies. If you have a naturally occurring wet spot in your yard, consider installing a rain garden that will store, filter and clean stormwater runoff from your roof and lawn. There are many plant varieties to choose from such as bald cypress, wax myrtle, swamp dogwood and Virginia sweetspire.

*Photo, Bob Farley*

Rain gardens are planted in low areas of the landscape to collect rainwater from a roof, driveway or street, allowing it to soak into the ground.



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# MARCH 2020

**STORMWATER TIP:**  
Properly apply the correct lawn and garden products in the recommended amounts. Always follow and refer to label directions.

The quality of the soil is a major factor in how lush and green a garden grows. Test your soil today.

Soil test kits are available at the AL Extension offices. Call 879-6964 to learn more.

Call a master gardener volunteer 1-877-252-GROW #3 for all of your gardening challenges.

Call the AL Extension's local plant diagnostic lab, 879-6964, to help identify pest and plant problems.

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1	2	3	4	5	6	7
8 Daylight Savings Time Begins	9	10	11	12	13	14
15	16	17 St. Patrick's Day	18	19	20 Great American Cleanup Begins (www.kab.org)	21
22 World Water Day	23	24	25 Lunch and Learn	26	27	28
29	30	31				
			<b>SPECIAL EVENTS:</b> Participate in a volunteer litter cleanup. Call 325-8741 for more information. March kicks off the FREE Lunch and Learn Seminars held at the Birmingham Botanical Gardens. Visit <a href="http://bbgardens.org/classes">bbgardens.org/classes</a> to learn more.			





# PERMEABLE PAVEMENT

**Birmingham Botanical Gardens**  
(2612 Lane Park Road, 35223)

Over the years, continued development around the beautiful Birmingham Botanical Gardens has increased the volume of stormwater flowing through the property. To stop potential erosion of walkways and control flooding, the Friends of Birmingham Botanical Gardens undertook a stormwater management project and replaced a concrete walking trail with permeable pavement. The base of the pavement is made of layers of sand, gravel, geotextile fabric, and course gravel. These materials help retain rainwater and allow it to infiltrate into the ground slowly. Permeable pavement is a versatile strategy that can be applied on a range of scales using a variety of materials, such as pervious asphalt, pervious concrete, and interlocking pavers. Often made from recycled materials, these eco-friendly products keep rainwater local instead of piping it to downstream neighbors.

*Photo, Hank Siegel*

Permeable pavement reduces stormwater runoff into the storm drain system by trapping rainwater and allowing it to infiltrate into the ground slowly.



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# APRIL 2020

**STORMWATER TIP:**  
**Follow directions and fertilize correctly!**  
**Any product left on the ground gets washed off by rainfall or irrigation which pollutes our creeks, rivers, and streams.**

Set your spreader to the recommended application rate by adjusting its dial to the number specified in the package directions.

Prevent added cleanup by avoiding the spread of fertilizer on paved areas.

Apply fertilizer when there is no chance of rain in the forecast.

The label is the LAW - use only the recommended amount.

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
			1 April Fool's Day	2	3	4
5 Palm Sunday	6	7	8 Lunch and Learn	9	10 Good Friday Voting begins for LitterQuitters.org!	11
12 Easter Sunday	13	14	15 Tax Day	16	17	18
19	20	21	22 Earth Day Lunch and Learn Voting ends for LitterQuitters.org!	23	24	25 Household Hazardous Waste Day! Visit <a href="http://www.jcdh.org">www.jcdh.org</a> for more information.
26	27	28	29	30		
			<b>SPECIAL EVENTS:</b> Take advantage of the Birmingham Botanical Gardens Spring Plant Sale and the Ruffner Mountain Native Plant Sale this month! Attend <i>Earth Day at the Gardens</i> on April 25 - it is free and lots of fun!			





# PERMEABLE PAVERS (SMALL SCALE)

**Permeable driveways reduce runoff.** Stormwater runoff is a major cause of water pollution in urban areas. When rain falls on roofs, streets and parking lots in cities and their suburbs, the water cannot soak into the ground as it should. The water quality and flooding impact of urban stormwater runoff can carry trash, vehicle fluids, and other pollutants into streams and cause flooding. This impact can be addressed by installing permeable surfaces that infiltrate or store rainwater where it falls. This practice can be particularly cost effective where property values are high and flooding is a problem. There are many products to choose from that achieve the same goals such as pervious asphalt, pervious concrete, and plastic grid pavers. These permeable surfaces allow rainwater to seep through the surface and soak into underlying layers of soil and gravel. In addition to reducing surface runoff, permeable materials also reduce the need for other conventional drainage features like gutters and storm drains that would be needed to convey rainwater elsewhere if it did not have the opportunity to infiltrate.

*Photo, Hank Siegel*

Permeable pavement reduces stormwater runoff by trapping and slowly releasing the rainwater into the ground and not into the storm drain system.



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# MAY 2020

**STORMWATER TIP:**  
**Properly dispose of pet waste. It's not just courteous, it is also healthy and environmentally sound thing to do.**

Pet waste contains harmful bacteria. It is washed away by rainfall and irrigation, and ends up polluting our creeks, rivers and streams.

150,000 dogs live in our area and produce 38 tons of waste per day.

Dog waste does not fertilize the grass and should never be added to compost. Always bag it and trash it. Placing waste in plastic bags generates heat, killing the pathogens.

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
					1	2
3	4	5	6 Lunch and Learn	7	8	9
10 Mother's Day	11	12	13	14	15	16
17	18	19	20 Lunch and Learn	21	22	23
24	25 Memorial Day	26	27	28	29	30
31			<b>SPECIAL EVENTS:</b> Participate in a volunteer litter cleanup. Call 325-8741 for more information. Attend FREE Lunch and Learn Seminars held at the Birmingham Botanical Gardens this month. Visit <a href="http://bbgardens.org/classes">bbgardens.org/classes</a> .			





# RAIN COLLECTION (SMALL SCALE)

**Rain Barrels collect and store runoff!** When it rains, water can either soak into the ground as it does in undeveloped areas or wash from impervious areas such as rooftops, paved streets, sidewalks, driveways and into the storm drain system as it does in developed areas. It is necessary to have impervious features in our environment, but it is also important to our local water quality to retain and install alternatives to capture and hold rainwater to help reduce flooding and pollution into our local waterways. One great alternative a homeowner can do is install a rain barrel (or several) into their existing gutter downspout system as shown in the photo. This barrel stores rainwater which can be used to water your yard and garden during drier times. This practice helps conserve tap water by using rainwater to water your plants and helps reduce the amount of runoff that enters the stormwater drainage system. Cisterns are larger rainwater storage systems which can be located above or below ground. They are often used in commercial development or in urban areas prone to flooding.

*Photo, Hank Siegel*

Rain barrels reduce the amount of stormwater that leaves your property by capturing it from a roof and holding it for later use in your lawn or garden.



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# JUNE 2020

**STORMWATER TIP:**  
**Properly apply bug killers. Insecticides kill all insects, even those you did not want to harm, such as our pollinators.**

Integrated pest management strategies are simple: identify the pest before reacting; choose the least toxic products first; spot treat; and avoid overspray.

All insects have a purpose. Many assist in helping keep plants healthy by eating bugs we consider to be bad pests.

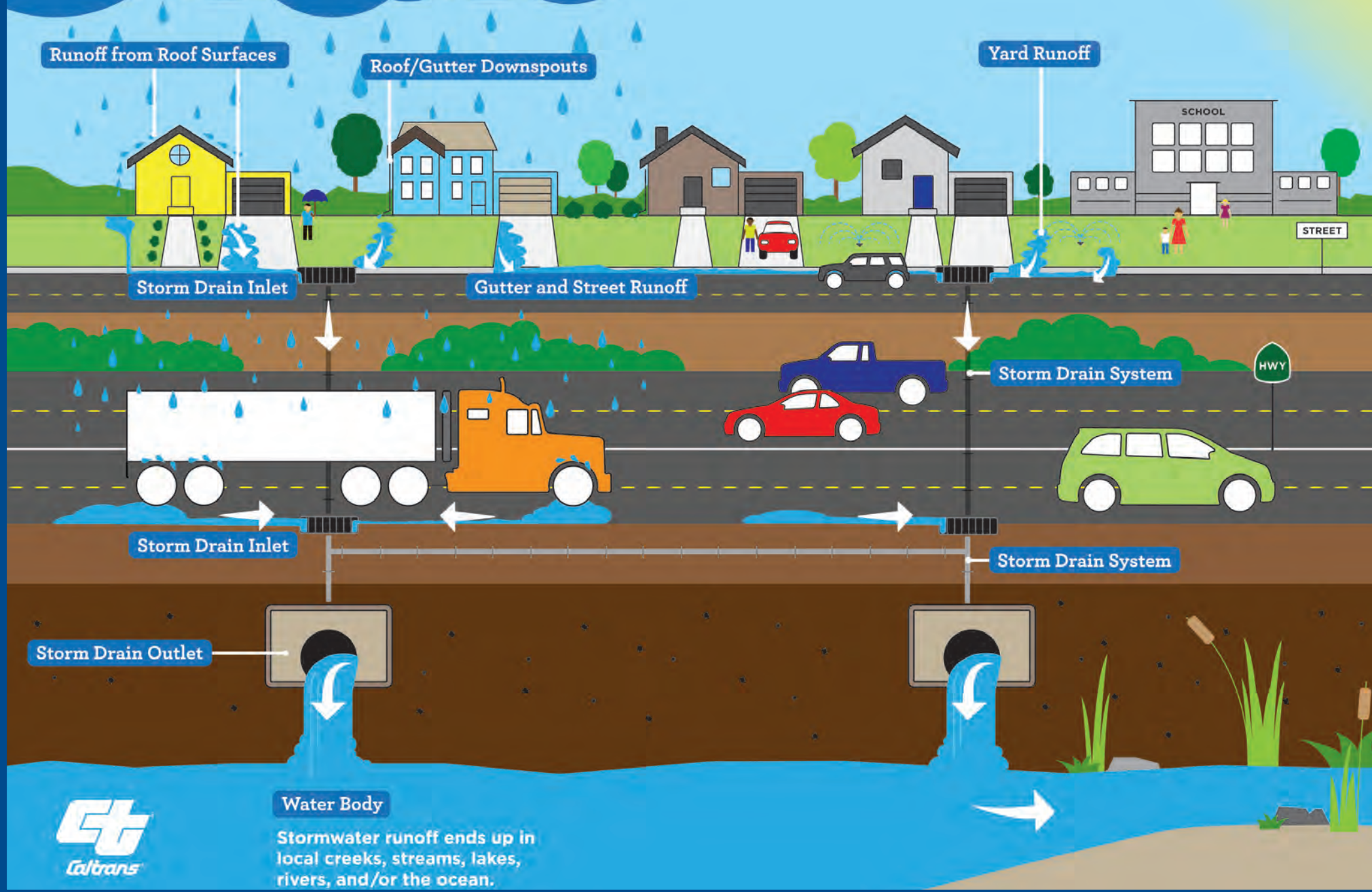
Call the AL Extension's local diagnostic lab (879-6964 ext. 19) to help identify pest and plant problems.

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	1	2	3 Lunch and Learn	4	5 World Environment Day	6
7	8 World Oceans Day	9	10	11	12	13
14	15	16	17 Lunch and Learn	18	19	20 Rain Barrel Workshop
21 Father's Day	22	23	24	25	26	27
28	29	30				
			<b>SPECIAL EVENTS:</b> Sign up to attend the <i>Rain Barrel Workshop</i> taking place on June 20th. Rain Barrels are available for purchase. Pre-registration with the Birmingham Botanical Gardens is required. Visit <a href="http://bbgardens.org/classes">bbgardens.org/classes</a> for more information.			





# Stormwater Runoff



## The Stormwater Drainage System

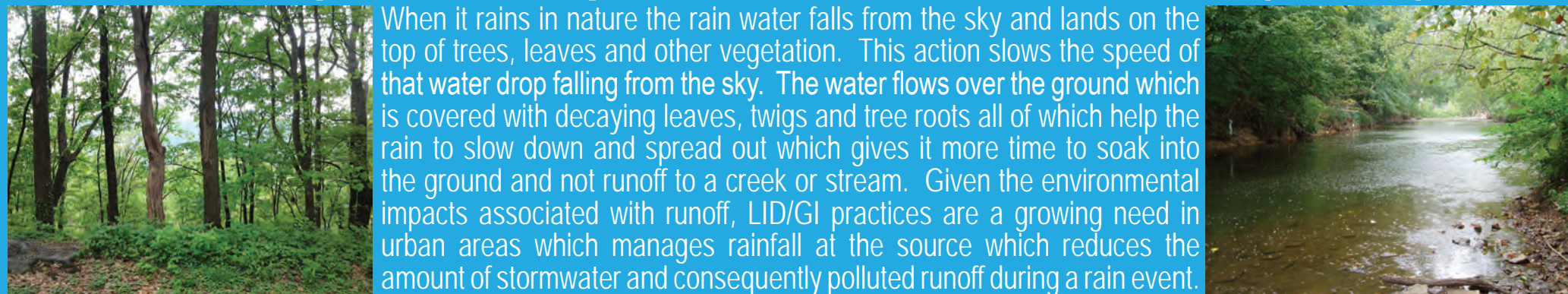
As land is developed the water that filters into the ground decreases and the need for diverting water from paved area increases. This man made Stormwater Drainage System is a series of curb inlets, open ditches, and pipes that funnel rain water directly to the nearest waterway with no filtration or treatment. It plays a vital role in urban areas to manage stormwater runoff primarily to prevent flooding.



Stormwater picks up pollution as it flows over the ground and other paved areas and carries these items into the Stormwater Drainage System. This polluted runoff includes oil/grease from roads & parking lots, litter/trash from people, and eroded soil from bare areas in yards.



## Low Impact Development / Green Infrastructure (LID/GI)



When it rains in nature the rain water falls from the sky and lands on the top of trees, leaves and other vegetation. This action slows the speed of that water drop falling from the sky. The water flows over the ground which is covered with decaying leaves, twigs and tree roots all of which help the rain to slow down and spread out which gives it more time to soak into the ground and not runoff to a creek or stream. Given the environmental impacts associated with runoff, LID/GI practices are a growing need in urban areas which manages rainfall at the source which reduces the amount of stormwater and consequently polluted runoff during a rain event.



# DIVERT DOWNSPOUTS

A lush garden bed filled with various green plants, including ferns and hostas, in front of a wooden fence. The fence is decorated with metal art, including a large green flower with a yellow center, a rusted butterfly, and a dark brown flower. A string of lights is visible at the top of the fence.

**Direct roof runoff to landscaped areas!** Stormwater runoff is a major cause of water pollution in urban areas. When rain falls on roofs, streets and parking lots, the water cannot soak into the ground as it would in an undeveloped area. Yet when rain falls in natural areas of your yard, the rainwater is absorbed and filtered by soils and plants, so it becomes less of a problem on your property and has less impact on the storm drain system. Plant choices will differ depending upon site conditions, but natural areas and rain gardens are ideal for sunny or shady areas and both dry or moist areas of your yard. This type of low impact development mimics nature in that it collects and absorbs rain water runoff from rooftops, driveways sidewalks and streets. They also are versatile and can be installed in almost any unpaved space. Other names for these applications are bioretention or bioinfiltration, but whatever you call it, the result is the same. They slow the flow of rainwater, they collect and store rainwater to allow it to soak into the ground rather than enter the stormwater drainage system.

*Photo, Hank Siegel*

Diverting your downspouts to flow into landscaped areas in your yard reroutes rooftop drainage from entering the storm drainage system.



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# JULY 2020

**STORMWATER TIP:  
Reduce stormwater runoff by keeping rain from leaving your property.**

Runoff carries lawn products and loose soil into to our creeks, rivers and streams causing water pollution.

Direct sprinklers and downspouts onto lawns, not driveways or sidewalks.

Enhance rainwater retention: aerate the lawn, amend the soil, and add mulch.

Add or reapply mulch to garden beds and natural areas to retain moisture, suppress weeds, and reduce the frequency of watering.

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
			1 Lunch and Learn	2	3	4 Independence Day
5	6	7	8	9	10	11
12	13	14	15 Lunch and Learn	16	17	18
19	20	21	22	23	24	25
26	27	28	29 Lunch and Learn	30	31	
			<b>SPECIAL EVENTS:</b> Attend Float Your Boat Summer Festival this month at Turkey Creek Nature Preserve - it's free and fun! Visit <a href="http://www.turkeycreeknp.com">www.turkeycreeknp.com</a> to learn more.			





# RAIN GARDENS



**Rain gardens reduce rainwater runoff!** Hard surfaces like roofs and driveways don't allow rainwater to soak into the ground. A rain garden can restore this natural function by keeping rainwater on site rather than leaving your property and becoming runoff. Runoff picks up trash and pollutants from the ground, carries it through storm drains and gutters, and empties untreated into waterways. You can prevent runoff by installing a rain garden in a low area of your yard. The rain garden will function like a miniature watershed by allowing rainwater to slowly infiltrate, thereby protecting nearby waterways from polluted runoff. Choose plants that are adapted to thrive in moist conditions but can tolerate drought. Place plants that prefer wetter conditions in the lowest areas, and plants that prefer dryer conditions on higher ground. Include native plants such as coneflowers, asters, American beautyberry, wax myrtle, bee balm, and hummingbird mint in the rain garden to provide a constant food source for birds.

*Photo, Bob Farley*

Rain gardens are planted in low areas of the landscape to collect rainwater from a roof, driveway or street, allowing it to soak into the ground.



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# AUGUST 2020

**STORMWATER TIP:**  
**Properly dispose of unused items in the trash and cover trash cans to keep out wind and animals.**

Secure all items before driving and do not toss anything out of the windows.

Trash that falls out or blows out of vehicles or trailers becomes litter. Litter on the ground is washed by rainwater into the storm drainage system and carried untreated to local creeks and streams.

Coordinate or participate in a volunteer roadside litter cleanup. Call 325-8741 to learn more.

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
						1
2	3	4	5	6	7	8
9	10	11	12 Lunch and Learn	13	14	15
16	17	18	19	20	21	22
23	24	25	26 Lunch and Learn	27	28	29
30	31	<b>SPECIAL EVENTS:</b> Attend FREE Lunch and Learn Seminars held at the Birmingham Botanical Gardens. Visit <a href="http://bbgardens.org/classes">bbgardens.org/classes</a> to learn more.				





# GREENWAYS



## **Birmingham Rotary Greenway Trail**

(1st Avenue South and 20th Street, 35233)

The Birmingham Rotary Greenway Trail was constructed in 2014 to address the urban stormwater runoff which for years flowed untreated into nearby Village Creek from this former abandoned segment of railroad. This massive stormwater management project was designed to slow the flow of runoff between two major Birmingham landmarks - Railroad Park and Sloss Furnaces – and prevent pollutants picked up by stormwater from entering the creek. The former rail bed was 22' below street level, which made it a natural pathway for stormwater runoff carrying debris and other pollutants directly into Village Creek. The depth of the rail bed was raised 6' to accommodate a new stormwater management system and to allow for more sunlight to support vegetation. The resulting 0.4-mile greenway walking trail (wheelchair accessible) has an updated system to filter and improve stormwater quality flowing from the right of way, and is beautifully landscaped with plants native to the Birmingham area to reduce the amount of water and pest controls needed.

*Photo, Hank Siegel*

Greenways are spaces of undeveloped land preserved for recreational use, habitat preservation and / or stormwater management.



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# SEPTEMBER 2020

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
		1	2 Lunch and Learn	3	4	5
6	7 Labor Day	8	9	10	11	12
13	14	15	16 Lunch and Learn	17	18	19
20	21	22	23	24	25	26
27 World Rivers Day	28	29	30			
			<b>SPECIAL EVENTS:</b> Plan to shop the Birmingham Botanical Gardens Fall Plant sale this month! Make plans to participate in either the Shades Creek Fall Litter Cleanup or the Village Creek Fall Litter Cleanup this month. Call 325-8741 for more information.			

**STORMWATER TIP:**  
 Keep leaves out of roadways, roadside ditches, and storm drains. Leaves in these areas block rain from entering storm drains, causing flooding.

Instead of piling your leaves or grass clippings at the curb, start looking at them as a valuable resource, rather than a nuisance. Use them as mulch or in a compost pile.

Mulch enhances soil by supplying micronutrients, stabilizing soil temperature, retaining moisture and reducing weed growth.





# GREENWAYS (SMALL SCALE)

## Backyards can be greenways, too!

It is common for backyards to be turf grass, with little to no landscaping and a rainwater channel in the back that fills with water when it rains. It is possible to convert this area into a place for relaxation and control the rainwater runoff so that very little water leaves the property. In this example, a flower bed with a deep soil layer has been constructed to collect the rainwater running off from the sidewalk. In addition, a gravel path has been added which helps transition to the rest of the yard. This section of the property has been designated as a small recreational area for kids and pets and is surrounded by plants, mostly native ones, to attract wildlife. The back of the property has been planted to intentionally collect the rainwater which washes from the front of the property and retain it in a rain garden setting so that the water has time to filter into the ground and not wash away to the nearby storm drain and waterway. The native plants chosen for this space also provide food and shelter for local wildlife including birds and butterflies. Once established, your drought tolerant native plants will require less water.

Photo, Tom Berres

Backyard greenways are spaces of undeveloped land preserved for recreational use, habitat preservation and/ or stormwater management.



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# OCTOBER 2020

**STORMWATER TIP:  
Compost yard waste into  
free mulch!**

Fallen leaves quickly decompose, making natural fertilizer and mulch. Mulch smothers weeds, helps soil retain moisture, and reduces soil erosion.

Chop up fallen leaves with your lawnmower. The leaf bits will decompose and provide free fertilizer.

Winterize your plants and natural areas by applying your fallen leaves as mulch.

Now is the best time to plant trees, shrubs, and other additions to the landscape.

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
				1	2	3
4	5	6	7	8	9	10
11	12 Columbus Day	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31 Halloween
			<b>SPECIAL EVENTS:</b> Make plans this month to attend the <i>Antiques at the Birmingham Botanical Gardens!</i>			





# BIO-FILTRATION WETLANDS

## Railroad Park Birmingham

(1600 1st Avenue South, 35233)

Railroad Park is a greenspace destination with over 19 acres of Brownfields that have been transformed into an exciting urban oasis. Based on feedback from hundreds of residents, the design was approached with the guiding principles of: stewardship of the environment, honoring the legacy of the railroad in the growth of the city, and connecting different parts of the community by building a unifying element along what was previously a divide. Several unique features were integrated into the plans, including a rain curtain, lake/stream system, amphitheater, outdoor pavilion and café, playgrounds, large open lawn and elevated rail trail. The lake/stream system is integral to the site and harvests, filters and recirculates stormwater. Previously a flat site, the park's topography has been contoured to provide opportunities to view the trains and city skyline, accommodate large musical events, offer respite in the strolling gardens and along the stream walks, as well as encourage connections to happen among Birmingham residents.

*Photo, Hank Siegel*

Bio-filtration wetlands are used to treat urban runoff before it reaches nearby bodies of water by allowing for extended pooling within the wetland.



To report a sanitary sewer overflow call 205-942-0681.

Within unincorporated Jefferson County call 205-325-5792 to report suspected water pollution; call 205-582-6555 to report illegal dumping. Within the City of Birmingham, call 311. For all other municipalities, call your local city hall.

# NOVEMBER 2020

**STORMWATER TIP:  
Properly dispose of your  
used cooking oil and  
grease for free!**

Fats, oils and grease poured down drains build up in pipes causing backups in homes and overflows into storm drains, creeks, rivers, and streams. Backups and overflows are costly to repair, smell bad, and are hazardous to your health.

New, clean recycling containers are available for FREE at all Jefferson County collection centers. Visit [www.jeffcoes.org](http://www.jeffcoes.org) to find a location near you.

Call 238-3876 for more information about Jefferson County's Household Cooking Oil and Grease Recycling Program.

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1 Daylight Savings Time Ends	2	3 Election Day	4	5	6	7
8	9	10	11 Veteran's Day	12	13	14
15 America Recycles Day	16	17	18	19	20	21
22	23	24	25	26 Thanksgiving Day	27	28
29	30					
			SPECIAL EVENTS:			





# WATER QUALITY INDICATORS

## Birmingham Zoo

(2630 Cahaba Road, 35223)

Wildlife and humans need clean water. Water quality is measured by several factors, such as the concentration of dissolved oxygen, bacteria levels, or the amount of material suspended in the water (turbidity). In some bodies of water, the concentration of pesticides, herbicides, and fertilizers from yards; oil and grease from roads and driveways; heavy metals from roofs; eroded soil from construction sites and home landscapes; waste from pets; and litter and trash from people are measured to determine water quality. Although scientific measurements are used to define water quality, it is not as simple as saying the water is good or bad; the determination depends upon the purpose of the water - is it for drinking, swimming / bodily contact or to just wash your car? Poor water quality can pose a health risk for people and for wildlife. Your everyday actions can impact local water quality, both good and bad. By applying Low Impact Development / Green Infrastructure practices you can reduce the amount of runoff from your property and consequently reduce pollution to our waterways.

*Photo, Birmingham Zoo*

Water quality indicators are measures of human impact on the ecosystem health and the effectiveness of remedial efforts.



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# DECEMBER 2020

**STORMWATER TIP:  
Properly dispose of your  
used cooking oil and  
grease for free!**

Rats, raccoons, opossums, and other vermin will feed on any type of grease, oil or other food waste that you place uncovered outside your home.

Jefferson County offers free, convenient, and easy household oil and grease recycling. Visit [www.jeffcoes.org](http://www.jeffcoes.org) to find a collection center near you.

Call 238-3876 for more information about Jefferson County's Household Cooking Oil and Grease Recycling Program.

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24 Christmas Eve	25 Christmas Day	26
27	28	29	30	31 New Year's Eve		
			<b>SPECIAL EVENTS:</b> Recycle your old electronics. Visit <a href="http://www.aconline.org/recycAL">www.aconline.org/recycAL</a> to learn more. Recycle your Christmas trees at the Birmingham Zoo. More information is available at <a href="http://www.birminghamzoo.com">www.birminghamzoo.com</a> .			





**CITY OF BIRMINGHAM**



**JEFFERSON COUNTY COMMISSION**



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