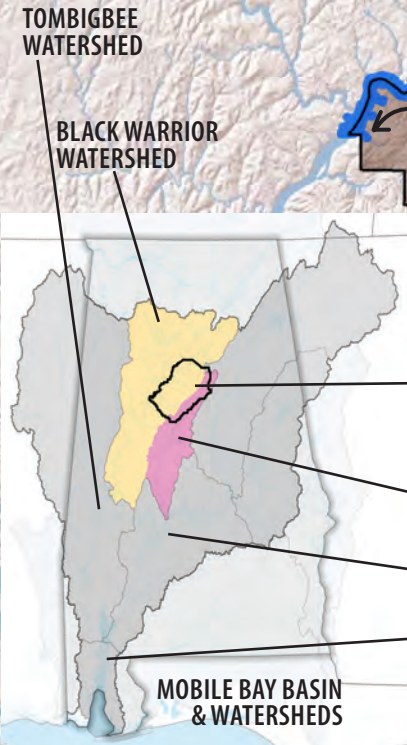


2021 STORMWATER CALENDAR



JEFFERSON COUNTY, ALABAMA MAJOR CREEKS AND SIGNIFICANT WATERSHEDS

BASINS and WATERSHEDS are interchangeable terms. They are an area of land area in which the elevation causes water to flow to a common waterway. They **do not** follow State or Municipal Boundaries. Instead, they are defined by mountain ridges and valleys.



JEFFERSON COUNTY, AL
CAHABA RIVER WATERSHED
ALABAMA RIVER WATERSHED
MOBILE RIVER WATERSHED

The maps displayed on this page have been prepared by Jefferson County Department of Development Services. Any use of these maps shall be at the sole risk of the person or entity using them. Jefferson County makes no warranty, expressed or implied, as to the accuracy of the information represented herein. Source: Alabama Water Watch; Black Warrior River Watershed Management Plan; and United States Geological Survey's National Hydrography Dataset and Watershed Boundary Dataset

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

Threats to Watersheds and Waterways

Clean water in our local rivers, creeks, lakes, and streams is important to human, animal, and environmental health. In a natural environment, rainwater has many opportunities to sink into the ground or slowly flow into a waterbody. Because we have built more and more roads, homes, and businesses over the years, rainwater has fewer chances to infiltrate. This process creates large amounts of rainwater moving very quickly across hard surfaces, often overwhelming our current drainage system causing flooding and stream banks to erode. This rainwater can also pick up many pollutants from the ground including motor oil, fertilizers, pesticides, eroded soil, pet waste, and litter. These items are carried directly into our local creeks and streams with no treatment. Pollution from stormwater runoff can be greatly reduced but we need your help. Please consider doing a few easy things, such as those shown below, to prevent its causes. Every action helps, especially the small ones!

Alabama establishes levels for the maximum amount of pollutants that can enter each waterbody based on the use of the stream. This is done by the Water Quality Branch of the Alabama Department of Environmental Management (ADEM). Local Stormwater Program staff then monitor these water bodies to ensure that they do not exceed the maximum level set. If they do, measures are taken to identify the source of the pollutant and reduce or eliminate it. Each program operates under an individualized National Pollutant Discharge Elimination System (NPDES) Stormwater Permit issued by ADEM. Contact information for the local Stormwater Programs in Jefferson County, along with other state and local agencies that help protect water quality, is listed in the box to the right and contained in a Jefferson County Environmental Community Resource Booklet which can be downloaded from www.jccal.org/dsStormwater.

Water Resources and Contacts

- ADEM** adem.state.al.us; 334-260-4501
Statewide agency that administers the Municipal NPDES Stormwater Permit to local jurisdictions.
- Alabama Water Watch** alabamawaterwatch.org
Statewide citizen-based water monitoring program.
- Alabama Rivers Alliance** alabamarivers.org
Statewide network of groups working to protect and restore all of Alabama's water resources.
- Black Warrior Riverkeeper** blackwarriorriver.org
Organization dedicated to promoting clean water throughout the Black Warrior River watershed.
- Cahaba River Society** cahabariversociety.org
Organization working to protect and restore the Cahaba River watershed and its rich diversity of life.
- Cahaba Riverkeeper** cahabariverkeeper.org
Organization dedicated to the protection and ecological integrity of the Cahaba watershed.
- City of Bessemer Stormwater Program**
bessemeral.org/stormwater; 205-424-4060
- City of Birmingham Stormwater Program**
birminghamal.gov/stormwatermanagement; 205-254-7771
- City of Leeds Stormwater Program**
leedsalabama.org/storm-water; 205-699-2585
- City of Hoover Stormwater Program**
hooveral.org/631/Stormwater-Management; 205-739-6888
- Freshwater Land Trust** freshwaterlandtrust.org
Organization that conserves, connects, and cares for land and water in Central Alabama.
- Friends of Shades Creek** shadescreek.org
Organization working for the protection of, and responsible development along, Shades Creek.
- Jefferson County Conservation District**
alconservationdistricts.gov Organization providing service, leadership, and assistance for the wise use, conservation, and development of natural resources.
- Jefferson County Department of Health Watershed Protection Program / SWMA** 205-933-1999
jcdh.org (search watershed protection program)
- Jefferson County Stormwater Program**
www.jccal.org/dsStormwater; 205-325-8741
- Village Creek Society, Inc.** villagecreeksociety.org
Organization that seeks to improve Village Creek.

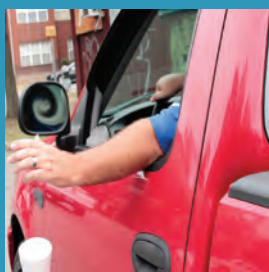
Stormwater pollution has a negative effect on water quality. It kills wildlife and habitat, degrades our drinking water, looks bad and smells even worse. The good news is that stormwater pollution can be prevented.



Sweep up excess yard chemicals.



Fix and repair vehicle leaks.



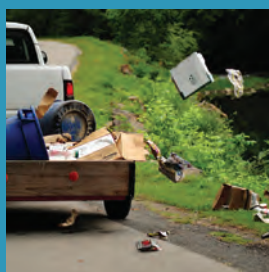
Never toss anything out of windows.



Pick up and dispose of pet waste.



Recycle used cooking oil.



Secure loose items before driving.



Cover bare soil to prevent erosion.



Read and follow label directions.

SHADES CREEK WATERSHED



Shades Creek, Cahaba River Basin

Shades Creek is just over 55 miles long; it begins at Sadler Gap beside Highway 11 near Roebuck and empties into the Cahaba River at the Shelby-Bibb County Line. Stormwater runoff from urban development in Bessemer, Birmingham, Homewood, Hoover, Irondale, Mountain Brook, and unincorporated areas of Jefferson County have impacted the creek, but, due to local preservation and conservation efforts, it has made a significant recovery. Shades Creek is home to an abundance of wildlife, most notably the Spotted Salamander.

Various Outdoor Areas

Flora Johnston Nature Park, Homewood Forest Preserve, Jemison Park, Irondale Furnace Trail, Shades Creek Greenway Trail, South side of Ruffner Mountain, Wildwood Wildflower Preserve

Biggest Threats / Endangered Species

Sedimentation, nutrients, loss of wetland habitat, litter, flooding, illegal dumping; endangered Cahaba Shiner

Local Organizations

Freshwater Land Trust
Friends of Shades Creek

Events

January - Salamander Festival
September - Volunteer Litter Clean-Up

Photo, Freshwater Land Trust

Shades Creek > Cahaba > Alabama > Mobile > Mobile Bay > Gulf of Mexico

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 2021

THIS MONTH RESOLVE TO MAKE ONE CHANGE THIS YEAR TO HELP IMPROVE WATER QUALITY!

January is a good month to ensure your vehicle and gas powered lawn equipment are in good working order. Oil and other petroleum products are toxic to fish and other animals that live in our creeks and streams.

If you do notice a spill or leak, please quickly and efficiently soak it up by sprinkling absorbent material such as cat litter over the spill. Once the spill is absorbed, sweep it up and properly dispose of the material according to the product label.

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 Martin Luther King Jr. Day	19	20	21	22	23
24	25	26	27	28	29	30
31	SPECIAL EVENTS: This month is the Salamander Festival; visit shadescreek.org for details! Recycle your Christmas trees at the Birmingham Zoo. Participate in a MLK Day of Service Litter Clean-Up; visit jccal.org for details!					



ILLICIT DISCHARGES



Identify and Report Water Pollution!

The term Illicit Discharge is used when referring to anything besides stormwater that enters the municipal stormwater drainage system whether intentional or unintentional. Illicit discharges cause water pollution. It is illegal for anything but stormwater to enter the stormwater drainage system. Our stormwater drainage system funnels untreated rainwater to local waterways. A few exceptions to the law are allowed such as landscape irrigation, dechlorinated swimming pool water and water used for firefighting. Reporting what you see is the first step to helping protect local water quality! In unincorporated areas of Jefferson County, call 205-325-5791; in City of Birmingham, call 311; and all other municipalities, call your local city hall. If known, provide the date, time, and location the incident occurred, along with the quantity of pollution observed.

**To report a sanitary sewer overflow
in Jefferson County, call the
24-Hour Hotline:
205-942-0681**

Only Rain Down the (Storm) Drain!

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.

FEBRUARY 2021

SHOW YOUR WATERSHED SOME LOVE THIS MONTH, LEARN HOW TO IDENTIFY AND REPORT WATER POLLUTION!

Exposed dirt is carried by rain to our creeks and rivers. It settles out on the bottom where it can smother fish and other animals as well as fill in the creek channel bottom. When this happens, there isn't enough room for the rainwater and may cause flooding to occur. An easy solution is to cover dirt piles and bare soil in your landscape with tarps and mulch to prevent erosion.

Properly dispose of used wash water. NEVER pour any liquid waste down a storm drain or in a roadside gutter or ditch.

	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 Presidents Day	16	17	18	19	20
	21	22	23	24	25	26	27
	28						
	Trees are beneficial in reducing Stormwater Runoff. Celebrate Alabama Arbor Week between February 21-27 and plant a tree!			SPECIAL EVENTS: Register your community to participate in the Spring Clean-Up through the Alabama People Against a Littered State; call 325-8741 for more information.			



VALLEY CREEK WATERSHED



Valley Creek, Black Warrior River Basin

Valley Creek is about 55 miles long with its underground source near Five Points South and empties into the Black Warrior River at Clevenger's Camp. The first 2 miles flow under paved urban areas and its waters become visible above ground near Legion Field at 5th Ave N and 7th St N. Stormwater runoff from Bessemer, Birmingham, Brighton, Fairfield, Midfield, Lipscomb, Hueytown, Pleasant Grove, Sylvan Springs and unincorporated Jefferson County impact this creek. As part of the Renew Our Rivers program, volunteer litter clean-ups are held biannually. Recently, a structural device called a "Litter Gitter" was installed to help remove the litter that gets washed by rain into the stormwater drainage system.

Outdoor Areas

Bessemer Rail Trail, High Ore Line Trail, Watercress Darter National Wildlife Refuge

Biggest Threats / Endangered Species

Litter, illegal dumping, flooding; endangered Watercress Darter

Local Organizations

Black Warrior Riverkeeper, Freshwater Land Trust, Valley Creek Clean-Up Committee

Events

March - Spring Volunteer Litter Clean-Up
August - Fall Volunteer Litter Clean-Up

Photo, Black Warrior Riverkeeper

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.

MARCH 2021

BE MINDFUL OF YOUR LOCAL CREEK WHEN DOING YOUR SPRING CLEANING THIS MONTH!

March madness begins when weeds start to invade every area of your landscape from the lawn to the flower beds. The urge to apply herbicides to kill the spring weeds is strong. Since there are so many products to choose from, it is best to identify what type of weeds you have. Once you know what you need to target, look at the product labels to see which ones will do the job.

The label will also tell you the amount of product you will need to apply including the calibration setting for your equipment.

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
		1	2	3	4	5	6
7	8	9	10	11	12	13	
14 Daylight Savings Time Begins	15	16	17 St. Patrick's Day	18	19	20	
21	22 World Water Day	23	24 Lunch and Learn	25	26 Great American Cleanup Begins (www.kab.org)	27	
28 Palm Sunday	29	30	31				
			SPECIAL EVENTS: Participate in the Valley Creek Spring or the Mulga Loop Road Clean-Up; visit jccal.org for details. March kicks off the FREE Lunch and Learn Seminars held at the Birmingham Botanical Gardens; visit bbgardens.org/classes for details.				



LITTERING

A photograph of a red car parked on a street. A white cup is on the ground in the foreground. A person's hand is visible on the steering wheel. The background shows a brick building and a tree.

If you litter, please stop!

Littering continues to be a major challenge in Jefferson County. Resources used to pick up and dispose of litter reduce the County and municipal staff, money and time available to build and repair existing roads.

Litter is unsightly, it harms everyone. Litter gets washed by rain into our creeks, rivers, lakes and streams. Many animals are killed in their attempts to eat litter. Litter can carry germs and bacteria harmful to aquatic life and humans.

Litter is preventable.

There are many easy opportunities to get rid of unwanted trash in your car, including trash receptacles at every gas station and at your home.

Become a Litter Quitter.

Get your family and neighbors involved and become part of the solution.

- Coordinate or participate in a volunteer litter clean-up. Community service hours are awarded for participation, great for high school and college students. Free materials are available, call 205-325-8741 for more information.
- Visit LitterQuitters.org and watch the anti-litter videos local high school students created as part of an annual competition for cash prizes.

Trash becomes litter which gets washed by rain into our creeks and streams.

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.

APRIL 2021

BE MINDFUL OF THE APRIL SHOWERS THIS MONTH WHEN APPLYING LAWN CHEMICALS, ESPECIALLY FERTILIZERS THAT CONTAIN PHOSPHORUS (P).

Alabama soils naturally contain high levels of P (the middle number on a fertilizer bag). Applying this nutrient that will not be taken up by plants will be washed by rainwater to the nearest creeks or stream causing algae blooms. Significant increases in algae decrease the oxygen that fish and other aquatic life need to survive.

Save money and the environment; test your soil to find out what type of fertilizer your grass actually needs to be green and healthy. Soil test kits are available at the AL Extension offices, call 205-879-6964 for details.

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



CAHABA RIVER WATERSHED

Cahaba River, Cahaba River Basin

Measuring 194 miles long, the Cahaba River is the longest flowing river in Alabama, providing natural beauty, recreation, and drinking water for the Birmingham area. With 128 native species of fish, 64 rare and threatened aquatic species, the Cahaba is one of the most biologically diverse rivers in the US. In 1912 it became the major source of drinking water for Birmingham. It begins north of Old Springville Road in Clay and joins the Alabama River near Selma. The impacts from stormwater runoff are observed all the way downstream to Dallas County. The first 58 miles are impacted by Birmingham, Hoover, Irondale, Leeds, Mountain Brook, Trussville, unincorporated Jefferson County and Vestavia Hills; Alabaster, Helena and Pelham also contribute to runoff issues.

Outdoor Areas

Cahaba River National Wildlife Refuge
Grants Mill Road Canoe Launch

Biggest Threats / Endangered Species

Stormwater runoff volume and velocity, erosion, siltation; endangered Cahaba Shiner and Flat Pebblesnail

Local Organizations

Freshwater Land Trust, Cahaba Riverkeeper, Cahaba River Society

Events

The Big Cahaba Clean-Up
Cahaba Lily Festival

Photo, Freshwater Land Trust

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.

MAY 2021

DON'T HARM ALL THE BUGS IN YOUR LANDSCAPE. REMEMBER CATERPILLARS TURN INTO BUTTERFLIES AND BABY BIRDS FEED ON ALL KINDS OF INSECTS!

Not all garden bugs are bad. Some are beneficial and eat bag bugs, others turn into pollinators and all of them are food for baby birds.

If your yard is being overtaken, call the Alabama Extension's local Plant Diagnostic Lab housed at the Birmingham Botanical Gardens. They can help identify what is bugging you along with suggestions to resolve it. Call 205-879-6964.

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
						1
2	3	4	5 Lunch and Learn	6	7	8
9 Mother's Day	10	11	12	13	14	15
16	17	18	19 Lunch and Learn	20	21	22
23	24	25	26	27	28	29
30	31 Memorial Day		SPECIAL EVENTS: Join in the Big Cahaba Clean-Up; visit cahabariversociety.org for details. Attend FREE Lunch and Learn Seminars held at the Birmingham Botanical Gardens this month; visit bbgardens.org/classes .			



NON-POINT SOURCE (NPS) POLLUTION



NPS is the leading cause of water quality problems in our waterways!

These photos show common issues that can cause water pollution in our local waterways. They are referred to as NPS pollution. Common NPS pollution is fertilizers, pesticides and herbicides from yards and gardens, oil and grease from roads and parking lots, heavy metals from roofs, eroded soil from construction sites and home landscaping projects, waste from pets, and litter from people. NPS pollution is carried by stormwater into the stormwater drainage system where it all flows untreated into waterways. NPS, also called polluted runoff, is the biggest threat to our water quality.

You can help reduce NPS and protect local water quality. While your part might seem small, every little bit adds up to make a significant difference.

- Secure items so they don't blow out of vehicles; never toss items out of vehicle windows
- Pick up and properly dispose of your pet's waste in the trash
- Read and follow label directions before applying yard chemicals; sweep up excess; clean up spills
- Fix and repair vehicle leaks



Your everyday activities can create NPS pollution.

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.

JUNE 2021

JUNE IS A PERFECT MONTH TO REDUCE YOUR STORMWATER RUNOFF BY INSTALLING A RAIN BARREL OR GARDEN.

When stormwater moves quickly, it does not have an opportunity to filter into the soil. It can pick up many pollutants from the ground including motor oil, fertilizers, 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. You can capture, hold and allow stormwater to soak into the ground by using a rain barrel, aerating your lawn or installing a rain garden.

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
		1	2 Lunch and Learn	3	4 World Environment Day	5
6	7	8 World Oceans Day	9	10	11	12
13	14	15	16 Lunch and Learn	17	18	19 Rain Barrel Workshop
20 Father's Day	21	22	23	24	25	26
27	28	29	30 Lunch and Learn			

The following center page, as well as the first two pages, can be used as posters when you are done with this calendar. Just carefully take out the staples.

SPECIAL EVENTS:
Sign up to attend the *Rain Barrel Workshop* this month. Barrels are available for purchase; pre-registration with the Birmingham Botanical Gardens is required. Visit bbgardens.org/classes for details.



The infographic displayed to the right was produced by the AWW IT assistant Jennie Powers for one of her classes at Auburn University. Jennie's infographic promotes Alabama's AWWsome aquatic biodiversity which ranks NUMBER 1 among all 50 states including freshwater fish, snails, mollusks, crayfish and turtles. The creation of this infographic initiated a greatly needed exchange among state agencies, universities and others about the estimates of our aquatic resources here in Alabama. This exchange resulted in the Geological Survey of Alabama conducting an updated GIS analysis of Alabama streams using the much-improved digital stream data from the USGS National Hydrography Dataset which contains much more detail than the previously used 1:100,000 scale data. In fact, the number of river miles increased about 55,000 miles - from more than 77,000 reported back in the 1990s to over 132,000 miles! This AWWsome infographic can be downloaded for free at: www.alabamawaterwatch.org/resources/publications.

GET INVOLVED!
Become a certified water quality monitor through the AWW Program. It is easy and FREE! You will learn how to evaluate physical, chemical and biological characteristics of your waterways by attending a FREE water chemistry, bacteriological or stream biomonitoring training workshop, or all three! Trainings are offered throughout the year, visit alabamawaterwatch.org to learn more.

AWW is a citizen volunteer water quality monitoring program covering all of the major river basins in Alabama. AWW uses EPA-approved monitoring plans with a community-based approach to train citizens to monitor conditions and trends in their local waterbodies.

America's Amazon

Alabama the Beautiful

10%

of the freshwater resources in the continental United States flow through or originate in Alabama.



14

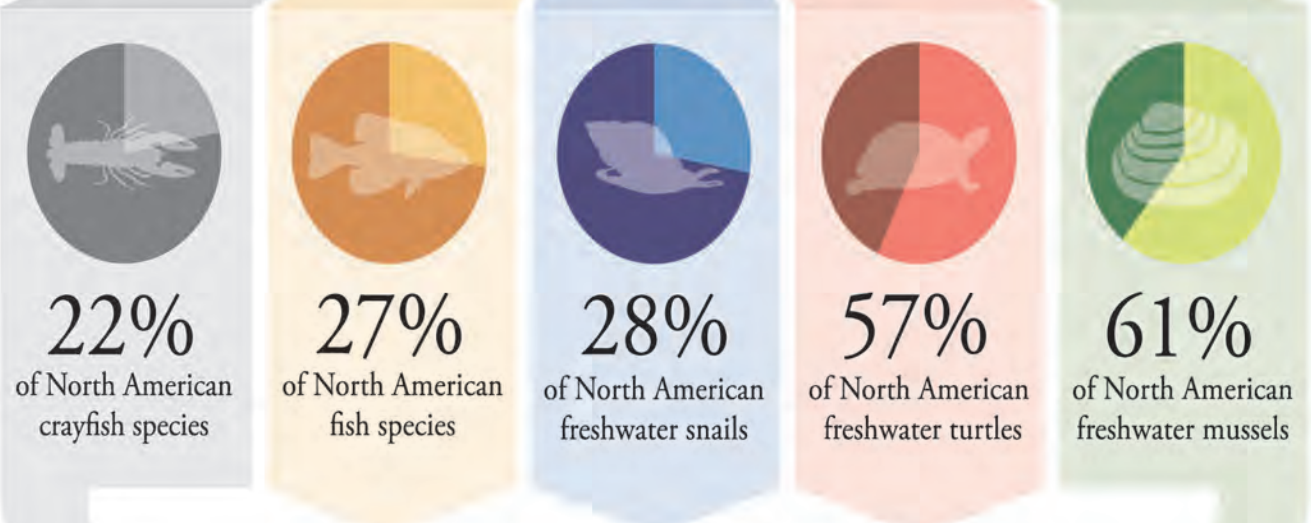
river basins form the waterways of Alabama

There are more than **132,000*** miles of rivers and streams in Alabama. That's enough to circle the earth 5 times!

Top 5 States

Freshwater Fish Biodiversity

Rank	State	# Species
1	Alabama	332*
2	Tennessee	320
3	Georgia	265
4	Kentucky	248
5	Mississippi	209



Native to Alabama

Alabama Ranks Number 1 in the U.S. for the number of freshwater crayfish, fish, snail, turtle and mussel species!



19% of the freshwater fish species in Alabama are at risk due to pollution and destruction of habitat.



Alabama Water Watch is a program in the Auburn University Water Resources Center, which receives support from the Alabama Agricultural Experiment Station and the Alabama Cooperative Extension System.

Get Involved!

Get certified as a water monitor and volunteer. Learn more at <http://alabamawaterwatch.org>

References:



Suggested Reading:

Fishes of Alabama by Herbert T. Boshchung and Richard L. Mayden

Southern Wonder: Alabama's Surprising Biodiversity By R. Scot Duncan



*Number of fish species and river/stream miles recently updated by GSA; river/stream miles updated using USGS National Hydrography Dataset (NHD) Best Resolution for Alabama (see <https://www.sciencebase.gov/catalog/item/56d6895e4b015c3062717a>, or google 'nhd best resolution for AL' for details).

TURKEY CREEK WATERSHED

Turkey Creek, Black Warrior River Basin

Turkey Creek is about 25 miles long and is a tributary of the Locust Fork with its headwaters in northeast Jefferson County near Old Springville Road in Clay. Stormwater runoff from Birmingham, Clay, Center Point, Fultondale, Kimberly, Morris, Trussville Pinson and unincorporated Jefferson County have impacted this creek. The waters of Turkey Creek are home to 7 protected species including 3 endangered species of fish.

Outdoor Areas

Turkey Creek Nature Preserve is housed on 466-acres near Pinson and offers a variety of activities including 5 walking trails, swimming, catch and release fishing. The Preserve offers structured educational programs. Visit turkeycreeknp.com for more details.

Biggest Threats / Endangered Species

Stormwater runoff volume and velocity, sediment; endangered Vermilion, Watercress and Rush Darters, Grey Bat and Flattened Musk Turtle

Local Organizations

Black Warrior Riverkeeper, Freshwater Land Trust, Turkey Creek Nature Preserve

Events

April: Native Plant Sale @ Ruffner Mtn.

July: Float Your Boat Summer Festival

Photo, Greg Harber

Turkey Creek > Locust Fork > Black Warrior > Tombigbee > Mobile > Mobile Bay > Gulf of Mexico

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.

JULY 2021

THIS INDEPENDANCE DAY,
CELEBRATE YOUR RIGHT
TO CLEAN WATER!

The Clean Water Act and its amendments were enacted to protect the health and safety of Americans. Its primary objective is to restore and maintain the integrity of the nation's waters. It regulates the discharge of pollutants into waterways to achieve water quality standard levels that are fishable and swimmable.

You can get involved in keeping water clean by supporting and participating with your local watershed group. See the calendar insert page for a listing of groups in and around Jefferson County.

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
					1	2	3
4 Independance Day	5	6	7	8	9	10	
11	12	13	14 Lunch and Learn	15	16	17	
18	19	20	21	22	23	24	
25	26	27	28 Lunch and Learn	29	30	31	
The previous center page, as well as the first two pages, can be used as posters when you are done with this calendar. Just carefully take out the staples.				SPECIAL EVENTS: Attend Float Your Boat Summer Festival this month at Turkey Creek Nature Preserve; visit turkeycreeknnp.com for details.			



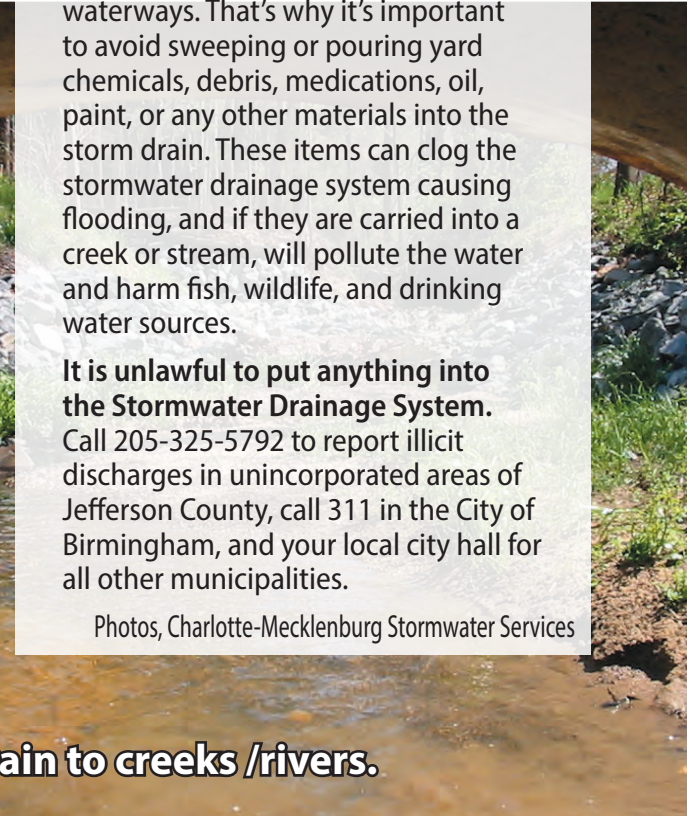
STORMWATER DRAINAGE SYSTEM



Only Rain Down The Storm Drain!
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 rainwater 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. While this system is critical to prevent flooding, it also allows whatever rainwater picks up to be carried into waterways. That's why it's important to avoid sweeping or pouring yard chemicals, debris, medications, oil, paint, or any other materials into the storm drain. These items can clog the stormwater drainage system causing flooding, and if they are carried into a creek or stream, will pollute the water and harm fish, wildlife, and drinking water sources.

It is unlawful to put anything into the Stormwater Drainage System. Call 205-325-5792 to report illicit discharges in unincorporated areas of Jefferson County, call 311 in the City of Birmingham, and your local city hall for all other municipalities.

Photos, Charlotte-Mecklenburg Stormwater Services



A system to prevent streets from flooding by transporting rain to creeks /rivers.

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.

AUGUST 2021

REMIND YOUR KIDS TO NOT LITTER WHEN HEADING BACK TO SCHOOL!

Littering continues to be a major challenge in Jefferson County. Not only is litter unsightly, it also affects the environment. Rain washes litter into creeks and rivers where many residents enjoy boating and fishing, and from where our drinking water supply is drawn.

If you litter, then please stop. Reinforce this message with your family members, especially your teenage kids. There are so many opportunities to get rid of unwanted trash from your car, including trash receptacles at every gas station.

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1	2	3	4	5	6	7
8	9	10	11 Lunch and Learn	12	13	14
15	16	17	18	19	20	21
22	23	24	25 Lunch and Learn	26	27	28
29	30	31				
			<p>SPECIAL EVENTS: Make plans to participate in the Fall Valley Creek Litter Clean-Up. Attend FREE Lunch and Learn Seminars held at the Birmingham Botanical Gardens; visit bbgardens.org/classes to learn more.</p>			



VILLAGE CREEK WATERSHED

Village Creek, Black Warrior River Basin

Village Creek was Birmingham's first source of drinking water (1873-1911). It begins in Roebuck Springs, flows 44 miles where it empties into the Locust Fork River near Miller Steam Plant. This creek is impacted by stormwater runoff from Adamsville, Birmingham, Irondale, Maytown, Mulga, Pleasant Grove, Sylvan Springs, Tarrant and unincorporated Jefferson County. It is dammed to form Bayview Lake, a water resource used by local industry. Once one of the most polluted streams in Alabama, it has made a significant recovery because of a federal flood mitigation plan in the 1990s and the Village Creek Greenway Project.

Outdoor Areas

East Lake Park, Ensley- Pratt Greenway, Village Creek Greenway

Biggest threats / Endangered Species

Stormwater runoff, soil erosion, littering and illegal dumping; endangered Watercress Darter

Local Organizations

Black Warrior Riverkeeper, Freshwater Land Trust, Village Creek Human and Environmental Justice Society, Inc.

Volunteer Litter Clean-Up Events

January - Minor Pkwy MLK Day of Service
March - Mulga Loop Road
September - Village Creek

Photo, Freshwater Land Trust



Village Creek > Locust Fork > Black Warrior > Tombigbee > Mobile > Mobile Bay > Gulf of Mexico

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.

SEPTEMBER 2021

HELP STOP LOCALIZED FLOODING; KEEP YARD DEBRIS OUT OF THE STORMWATER DRAINAGE SYSTEM.

The stormwater drainage system is designed for rainwater only. When this system gets clogged with leaves and grass clippings there is no room for the rainwater to enter and flooding occurs.

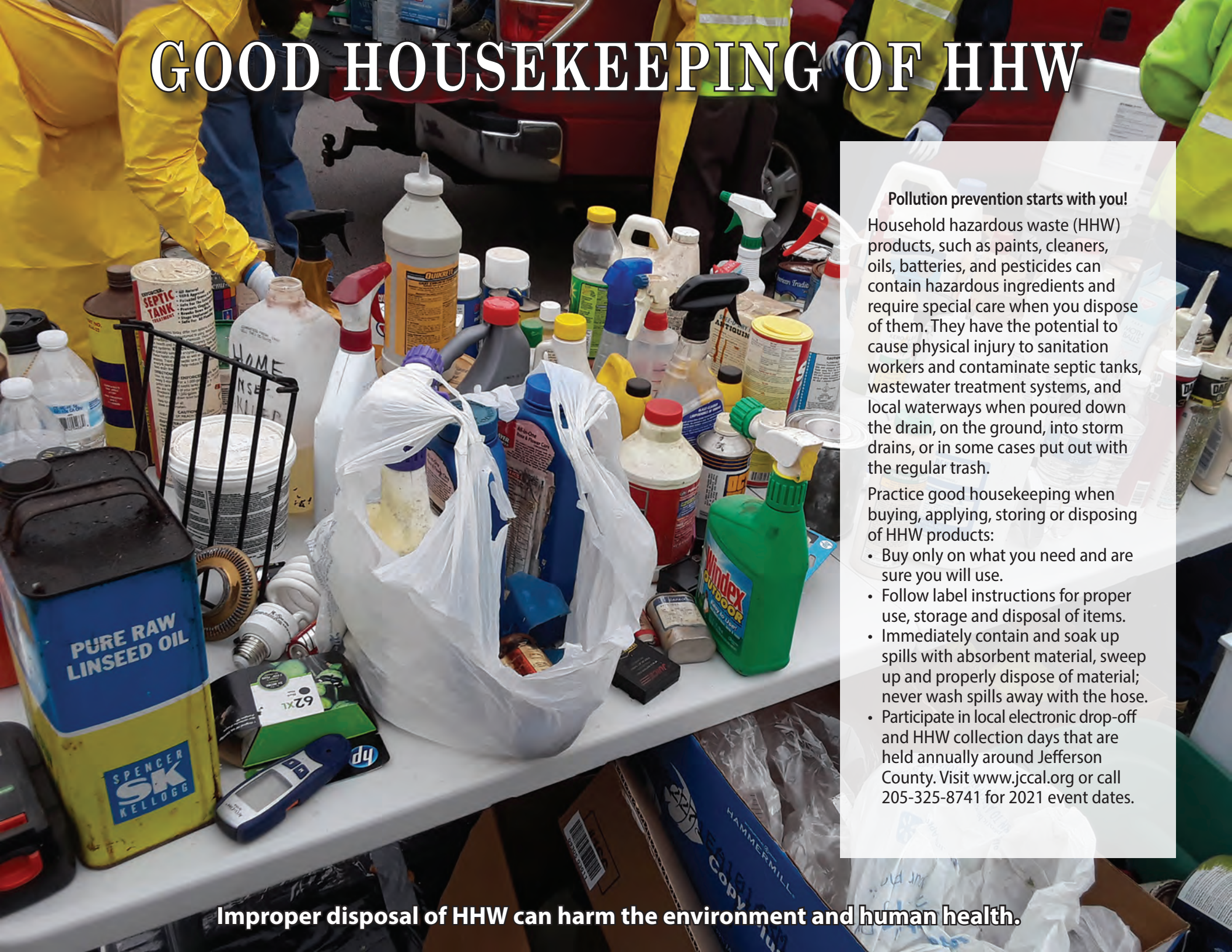
If you hire a yard professional, make sure they don't blow yard debris in the street, curb inlet or drainage ditch.

Not all cities offer loose leaf curbside pickup. Call your local city hall to find out what yard debris services/resources they offer.

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



GOOD HOUSEKEEPING OF HHW



Pollution prevention starts with you!

Household hazardous waste (HHW) products, such as paints, cleaners, oils, batteries, and pesticides can contain hazardous ingredients and require special care when you dispose of them. They have the potential to cause physical injury to sanitation workers and contaminate septic tanks, wastewater treatment systems, and local waterways when poured down the drain, on the ground, into storm drains, or in some cases put out with the regular trash.

Practice good housekeeping when buying, applying, storing or disposing of HHW products:

- Buy only on what you need and are sure you will use.
- Follow label instructions for proper use, storage and disposal of items.
- Immediately contain and soak up spills with absorbent material, sweep up and properly dispose of material; never wash spills away with the hose.
- Participate in local electronic drop-off and HHW collection days that are held annually around Jefferson County. Visit www.jccal.org or call 205-325-8741 for 2021 event dates.

Improper disposal of HHW can harm the environment and human health.

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OCTOBER 2021

DO YOUR PART TO REDUCE THE AMOUNT OF NUTRIENTS IN OUR WATERWAYS!

Nutrient pollution is the process where too many nutrients, mainly nitrogen (N) and phosphorus (P), wash into waterways. These nutrients come from fertilizers, sewer overflows, dog waste, and failing septic systems.

Test your soil and apply the right fertilizer product in the correct amount.

Have your septic systems inspected and pumped out at least every five years.

Always pick up your pet's waste and place it in the trash for proper disposal.

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
					1	2
3	4	5	6	7	8	9
10	11 Columbus Day (observed)	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31 Halloween			SPECIAL EVENTS: Did you know this calendar converts into 3 posters you can hang on the wall after the calendar year is over? Remove the center staples - the first two complete pages are now posters, as is the centerfold page.			



FIVE MILE CREEK WATERSHED



Five Mile Creek, Black Warrior River Basin

Five Mile Creek arises from a spring near Clay Chalkville and is joined by several other tributary springs flowing westerly for about 43 miles. This creek is impacted by stormwater runoff from Birmingham, Brookside, Center Point, Fultondale, Gardendale, Graysville, Tarrant, and unincorporated Jefferson County before it empties in the Locust Fork River in western Jefferson County near the Flat Top Mine. It became highly polluted from the mining industry, but in more recent years due to less industrial impact and creek protection projects, it has made a significant recovery.

Outdoor Areas

Black Creek Park, Brookside Greenway Park, City of Tarrant Enviroplex, Five Mile Creek Greenway, Gardendale Urban Trail System, North Aqueduct Greenway

Biggest Threats / Endangered Species

Dumping of trash, tires and debris; endangered Flattened Musk Turtle

Local Organizations

Black Warrior Riverkeeper, Freshwater Land Trust, Five Mile Creek Greenway Partnership

Events

Brookside Volunteer Litter Clean-Up

Photo, Charles Cleckler

Five Mile Creek > Locust Fork > Black Warrior > Tombigbee > Mobile Bay > Gulf of Mexico

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 2021

HELP PREVENT SANITARY SEWER OVERFLOWS THIS HOLIDAY SEASON.

Deep fried turkeys and other fried foods generate many gallons of used cooking oil and grease. Pouring these items down the kitchen sink drain creates problems at your home and in the sanitary sewer system. Backups and overflows are costly to repair, smell bad, and are hazardous to your health.

Allow grease to cool and then pour into a container to recycle. New, clean recycling containers are available for FREE at all Jefferson County collection centers. Visit www.jeffcoes.org to find a location near you.

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
		1	2 Election Day	3	4	5	6
7 Daylight Savings Time Ends	8	9	10	11 Veterans Day	12	13	
14	15 America Recycles Day	16	17	18	19	20	
21	22	23	24	25 Thanksgiving Day	26	27	
28	29	30					
				SPECIAL EVENTS: Recycle your used Household Cooking Oil and Grease; visit jeffcoes.org to find a location near you.			



WATER QUALITY INDICATORS

Clean water is essential to all life!

Wildlife and humans need clean water, including the Rush Darter pictured to the right. Water quality is measured by several chemical factors, such as the concentration of dissolved oxygen, temperature, pH, bacteria levels, the amount of material suspended in the water (turbidity), and by the number and variety of aquatic life found living in the waterway.

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 use or purpose of the water - is it for drinking, swimming / bodily contact or to just wash your car? The stream (surface water) use classifications for Alabama's waterways are established by the Water Quality Branch of the Alabama Department of Environmental Management. Listings can be viewed and downloaded from their web site, www.adem.state.al.us.

YOU can learn how to monitor YOUR local water, no science background needed! Sign up to today to attend a free Alabama Water Watch training, visit www.alabamawaterwatch.org for more details.



Water quality indicators are a measure of the stream's health.

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.

DECEMBER 2021

FLUSHABLE WIPES ARE NOT FLUSHABLE – THEY CAUSE BLOCKAGES THAT CAN LEAD TO OVERFLOWS IN THE SANITARY SEWER SYSTEM.

Flushable baby wipes and disinfecting wipes have been proven to take longer to break down than traditional toilet paper that is designed for the sanitary sewer system. As they make their way down the pipes, rather than breaking down quickly, they start clogs that lead to blockages and cause sanitary sewer overflows.

Place all used wipes, flushable or not, in the household trash for proper disposal.

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	

This calendar converts into 3 posters you can hang on the wall. When this month is over, safely remove the staples. The first 2 pages and the center page are now posters!

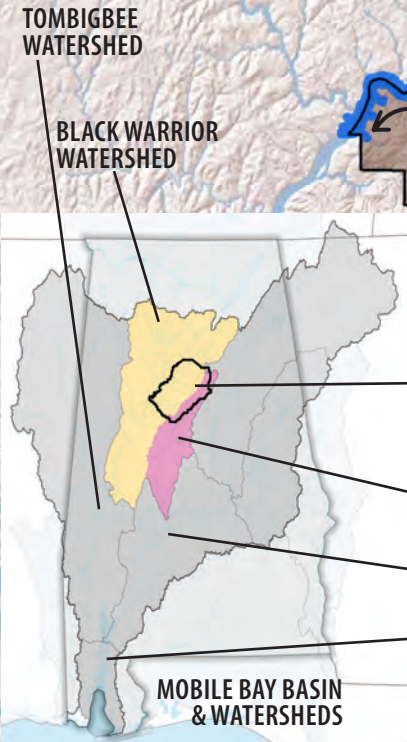
SPECIAL EVENTS:

Recycle your old electronics; visit jccal.org to learn more. Recycle your Christmas trees at the Birmingham Zoo; more information is available at birminghamzoo.com.



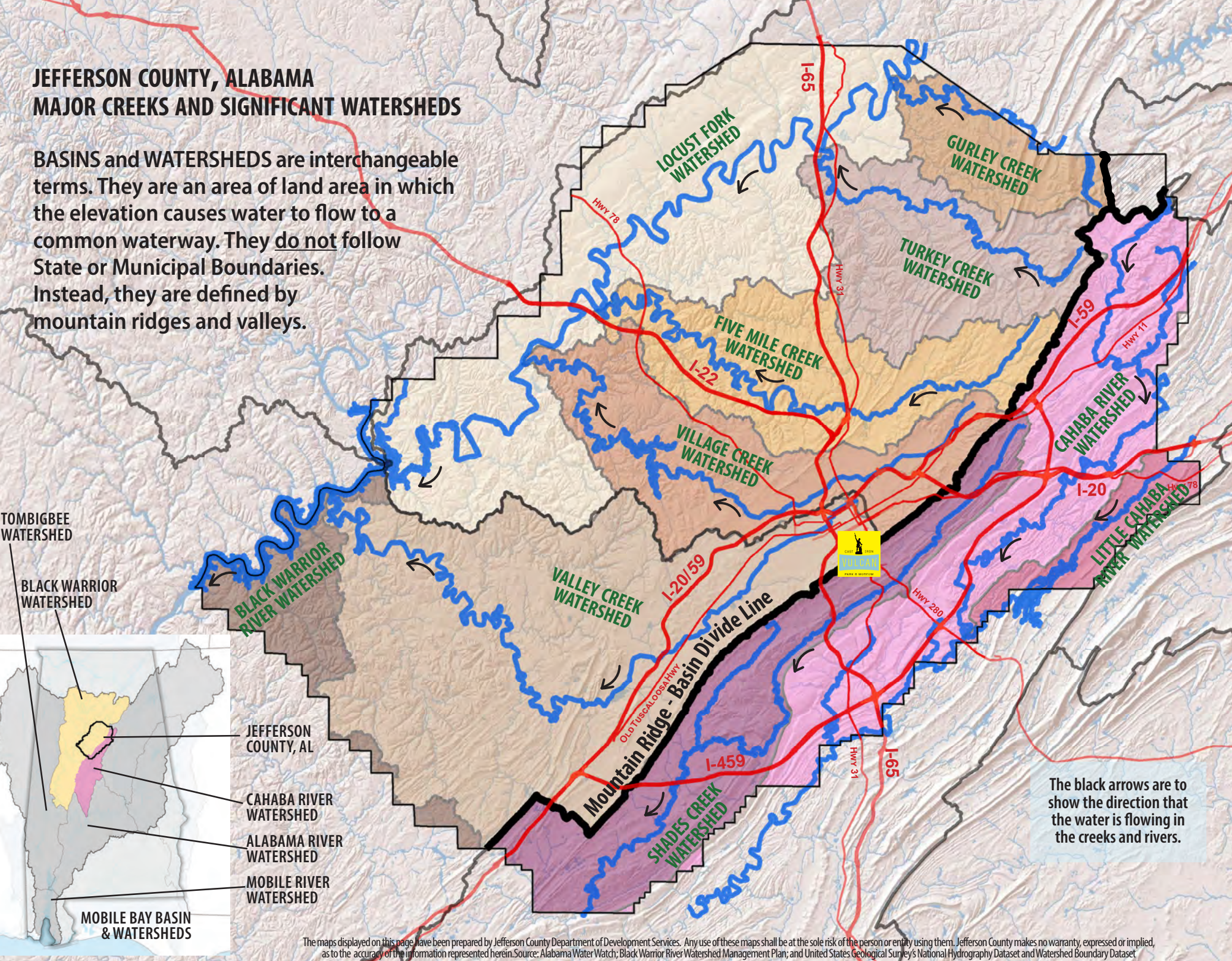
JEFFERSON COUNTY, ALABAMA MAJOR CREEKS AND SIGNIFICANT WATERSHEDS

BASINS and WATERSHEDS are interchangeable terms. They are an area of land area in which the elevation causes water to flow to a common waterway. They **do not** follow State or Municipal Boundaries. Instead, they are defined by mountain ridges and valleys.



JEFFERSON COUNTY, AL
CAHABA RIVER WATERSHED
ALABAMA RIVER WATERSHED
MOBILE RIVER WATERSHED

The maps displayed on this page have been prepared by Jefferson County Department of Development Services. Any use of these maps shall be at the sole risk of the person or entity using them. Jefferson County makes no warranty, expressed or implied, as to the accuracy of the information represented herein. Source: Alabama Water Watch; Black Warrior River Watershed Management Plan; and United States Geological Survey's National Hydrography Dataset and Watershed Boundary Dataset



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

Threats to Watersheds and Waterways

Clean water in our local rivers, creeks, lakes, and streams is important to human, animal, and environmental health. In a natural environment, rainwater has many opportunities to sink into the ground or slowly flow into a waterbody. Because we have built more and more roads, homes, and businesses over the years, rainwater has fewer chances to infiltrate. This process creates large amounts of rainwater moving very quickly across hard surfaces, often overwhelming our current drainage system causing flooding and stream banks to erode. This rainwater can also pick up many pollutants from the ground including motor oil, fertilizers, pesticides, eroded soil, pet waste, and litter. These items are carried directly into our local creeks and streams with no treatment. Pollution from stormwater runoff can be greatly reduced but we need your help. Please consider doing a few easy things, such as those shown below, to prevent its causes. Every action helps, especially the small ones!

Alabama establishes levels for the maximum amount of pollutants that can enter each waterbody based on the use of the stream. This is done by the Water Quality Branch of the Alabama Department of Environmental Management (ADEM). Local Stormwater Program staff then monitor these water bodies to ensure that they do not exceed the maximum level set. If they do, measures are taken to identify the source of the pollutant and reduce or eliminate it. Each program operates under an individualized National Pollutant Discharge Elimination System (NPDES) Stormwater Permit issued by ADEM. Contact information for the local Stormwater Programs in Jefferson County, along with other state and local agencies that help protect water quality, is listed in the box to the right and contained in a Jefferson County Environmental Community Resource Booklet which can be downloaded from www.jccal.org/dsStormwater.

Water Resources and Contacts

- ADEM** adem.state.al.us; 334-260-4501
Statewide agency that administers the Municipal NPDES Stormwater Permit to local jurisdictions.
- Alabama Water Watch** alabamawaterwatch.org
Statewide citizen-based water monitoring program.
- Alabama Rivers Alliance** alabamarivers.org
Statewide network of groups working to protect and restore all of Alabama's water resources.
- Black Warrior Riverkeeper** blackwarriorriver.org
Organization dedicated to promoting clean water throughout the Black Warrior River watershed.
- Cahaba River Society** cahabariversociety.org
Organization working to protect and restore the Cahaba River watershed and its rich diversity of life.
- Cahaba Riverkeeper** cahabariverkeeper.org
Organization dedicated to the protection and ecological integrity of the Cahaba watershed.
- City of Bessemer Stormwater Program**
bessemeral.org/stormwater; 205-424-4060
- City of Birmingham Stormwater Program**
birminghamal.gov/stormwatermanagement; 205-254-7771
- City of Leeds Stormwater Program**
leedsalabama.org/storm-water; 205-699-2585
- City of Hoover Stormwater Program**
hooveral.org/631/Stormwater-Management; 205-739-6888
- Freshwater Land Trust** freshwaterlandtrust.org
Organization that conserves, connects, and cares for land and water in Central Alabama.
- Friends of Shades Creek** shadescreek.org
Organization working for the protection of, and responsible development along, Shades Creek.
- Jefferson County Conservation District**
alconservationsdistricts.gov Organization providing service, leadership, and assistance for the wise use, conservation, and development of natural resources.
- Jefferson County Department of Health Watershed Protection Program / SWMA** 205-933-1999
jcdh.org (search watershed protection program)
- Jefferson County Stormwater Program**
www.jccal.org/dsStormwater; 205-325-8741
- Village Creek Society, Inc.** villagecreeksociety.org
Organization that seeks to improve Village Creek.

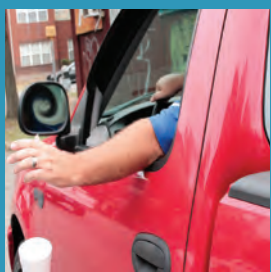
Stormwater pollution has a negative effect on water quality. It kills wildlife and habitat, degrades our drinking water, looks bad and smells even worse. The good news is that stormwater pollution can be prevented.



Sweep up excess yard chemicals.



Fix and repair vehicle leaks.



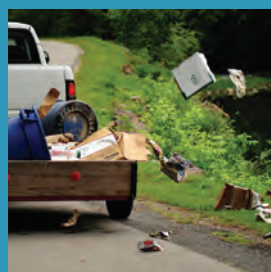
Never toss anything out of windows.



Pick up and dispose of pet waste.



Recycle used cooking oil.



Secure loose items before driving.



Cover bare soil to prevent erosion.



Read and follow label directions.

CITY OF BIRMINGHAM



JEFFERSON COUNTY COMMISSION

