

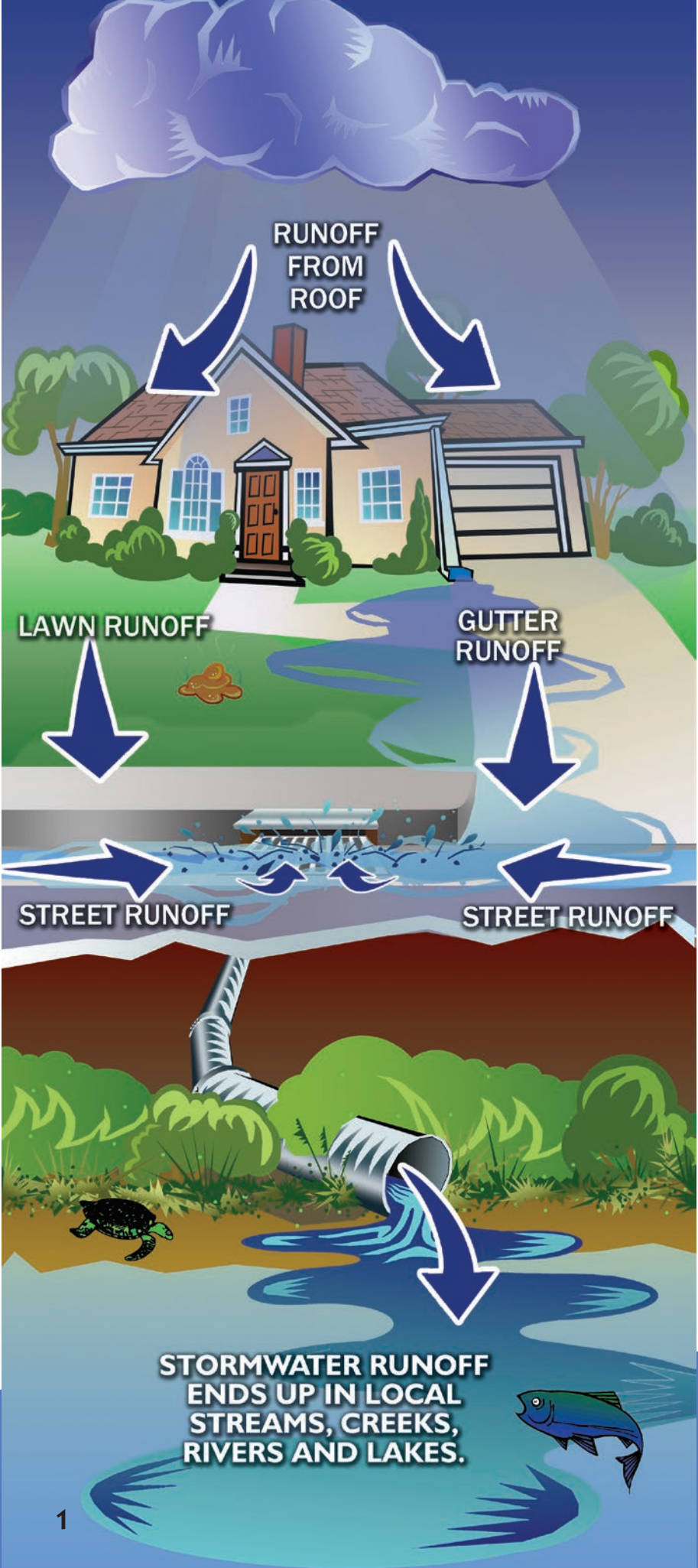


Stormee's Kids Activity Booklet

BROUGHT TO YOU BY:

City of
Fayetteville
North Carolina
STORMWATER

DO YOU KNOW
WHERE THE
rain goes?



What is Stormwater and how can we keep it clean?

Have you ever walked along the street on a rainy day, and wondered “Where does all of this water go”? The answer may surprise you. When it rains, some of the water soaks into the ground to water our trees, grasses and flowers. However, rain water that falls on our city streets, parking lots and roof tops never has a chance to soak into the ground. It runs off of these hard surfaces and collects in storm inlets (which can be seen along streets with curbs), gutters and ditches. These devices are all a part of the storm drainage system, and this system carries the water directly to our rivers lakes and streams without any treatment! This is what we call stormwater. You may be asking yourself, “Why is this important”? Well, stormwater can become polluted as it flows over streets and lawns, picking up all kinds of pollution. When it rains, our city takes a bath. The rainwater washes all of the grime and grease away, as well as trash and other contaminants. Because the water enters the storm drainage system, it flows directly to our local rivers, lakes and streams. Stormwater never passes through a treatment plant. All of these pollutants that stormwater can pick up can harm fish and other animals that live in the water, as well as to contaminate our drinking water. However, there is hope! Pollution is preventable, and if we all do our part, we can limit the amount of pollutants entering our waterways.

Here are a few ways you can help prevent pollution.

Remember, you can do your part and “Be the Solution to Stormwater Pollution”!



Recycle whenever possible! Recycling reduces the amount of trash that is dumped at our local landfills.



Report any signs of pollution in creeks or streams.



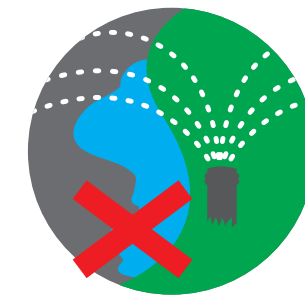
Dispose of yard debris properly- never sweep it into the storm drain.



Don't throw trash and other items into the storm drain. Remember, only rain in the storm drain!



Pick up and dispose of pet waste properly.



Set sprinklers to water the lawn only, not the pavement.

PROTECT OUR CITY!
Report illegal dumping.

Call our Stormwater Hotline at 910-433-1613.
For more information, please visit our website:
www.cityoffayetteville.org/stormwater.



NO MATTER WHERE WE LIVE, WE LIVE IN A **Watershed.**

Watersheds are areas of land where all of the water within the area drains to a specific body of water like a river, lake or stream. Watersheds, however, do not just consist of land and water, but they consist of everything that goes on within them. People, animals, farms, and cities all reside within a watershed, and play an important role in the health of the watershed.

The City of Fayetteville has 15 watersheds that fall within its boundaries, and all of those watersheds will eventually drain to the Cape Fear River. Within these watersheds, we get the water that we use for drinking, growing food, and use for recreation. Protecting these watersheds is so important, because they support life within our community. So, how can we protect our watershed?



Preventing Pollution

We can protect our watershed by preventing pollution. Cleaning up behind ourselves and putting trash in its proper place is a great way to start. Also, by ensuring that only rain water enters our storm drains, will keep harmful contaminants out of our streams and rivers.



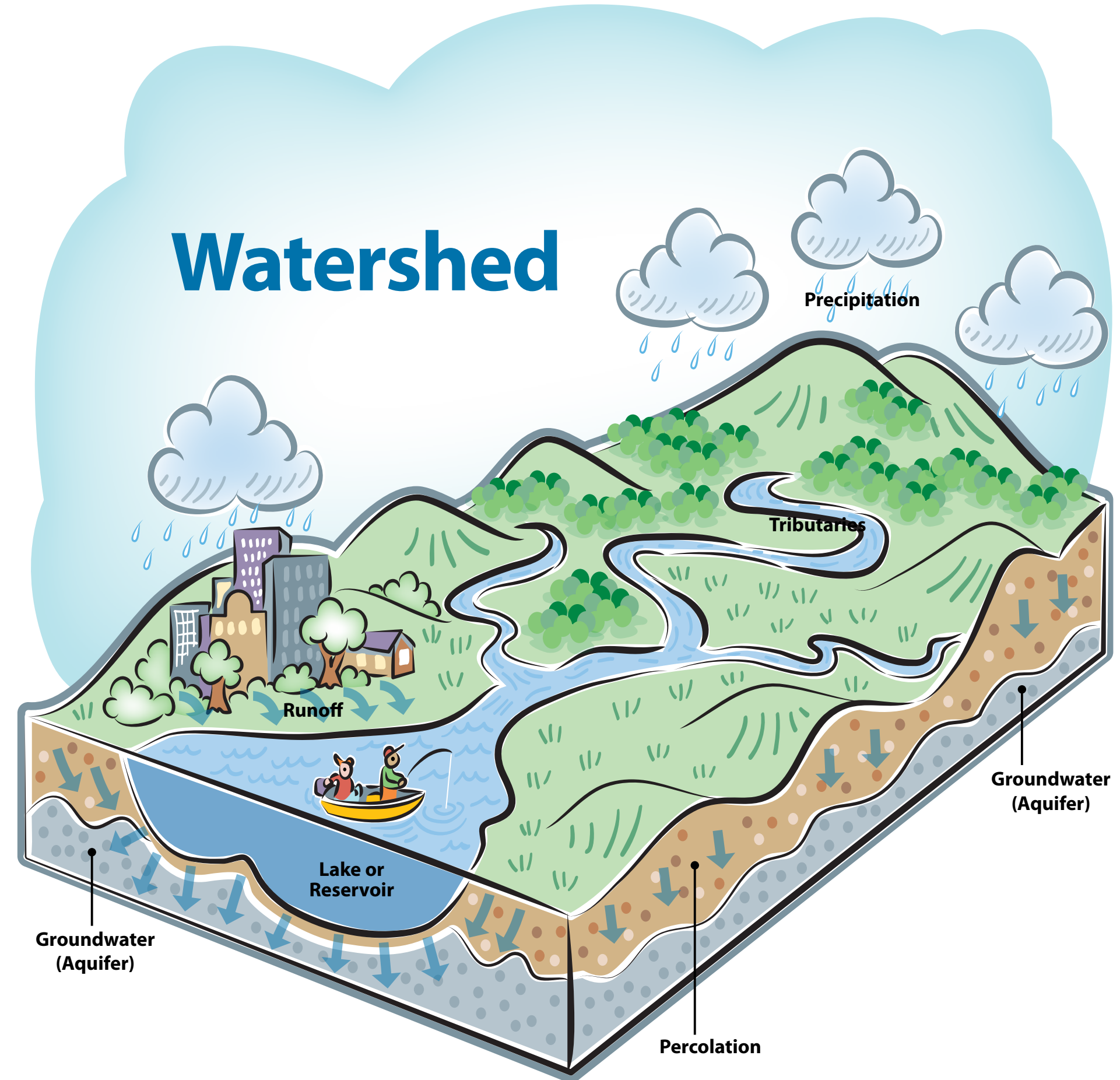
Conservation

Using our water wisely can help to protect our watersheds. Examples of conserving water can be as simple as turning your faucet off while brushing your teeth. Bigger efforts to conserve water can be to only water your lawn when it is needed.

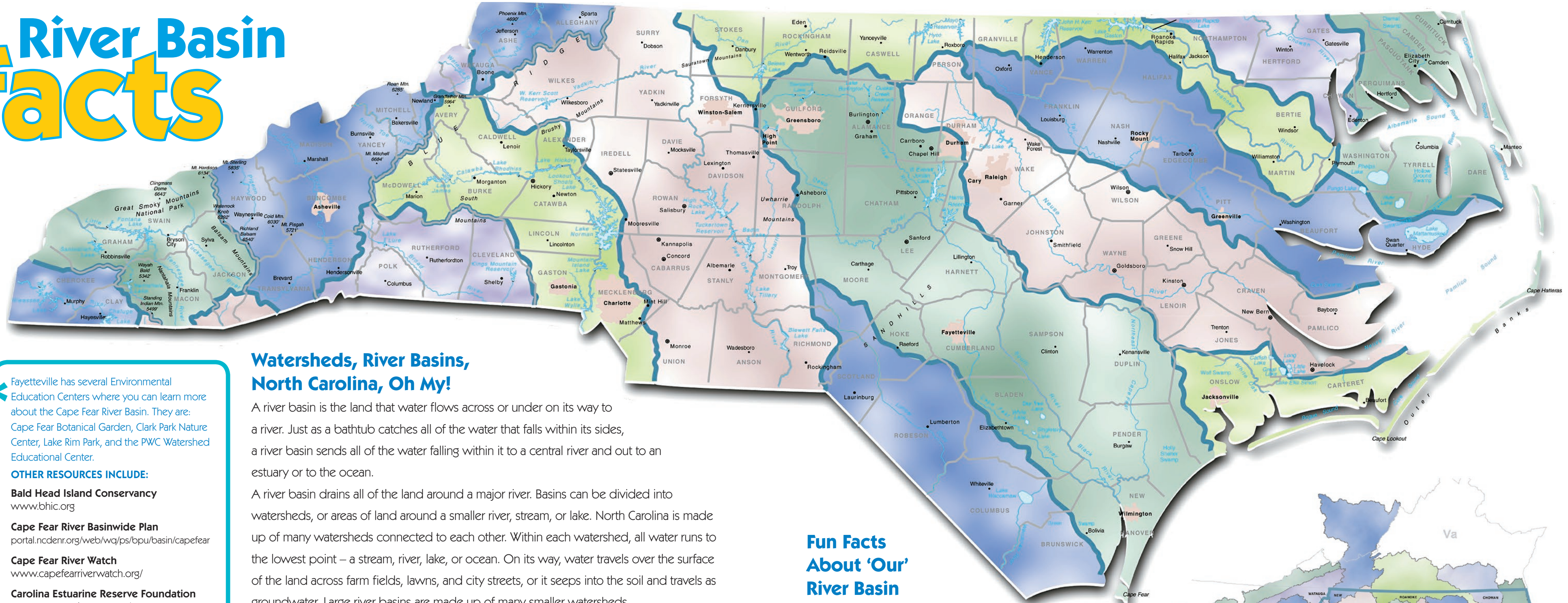


Watershed Restoration

Restoring polluted watersheds can help them to become healthy again. Simply picking up trash along a roadway can help to restore a watershed. We can also construct wetlands along rivers, lakes and streams to help buffer out any chemicals from runoff before the water enters the water body. Always remember that we all live downstream. Whatever happens upstream can affect us, and whatever we do can affect people downstream from us. Also, what we do today can affect our watershed tomorrow.



River Basin facts



Watersheds, River Basins, North Carolina, Oh My!

A river basin is the land that water flows across or under on its way to a river. Just as a bathtub catches all of the water that falls within its sides, a river basin sends all of the water falling within it to a central river and out to an estuary or to the ocean.

A river basin drains all of the land around a major river. Basins can be divided into watersheds, or areas of land around a smaller river, stream, or lake. North Carolina is made up of many watersheds connected to each other. Within each watershed, all water runs to the lowest point – a stream, river, lake, or ocean. On its way, water travels over the surface of the land across farm fields, lawns, and city streets, or it seeps into the soil and travels as groundwater. Large river basins are made up of many smaller watersheds.

All of us living in North Carolina live in a river basin. It is part of your ecological address. In Fayetteville, we are in the Cape Fear River Basin. We can change what happens in our river basin, for good or bad, by how we treat the natural resources – the soil, water, air, plants, and animals. As water moves downstream, it carries gravel, sand, and silt. It also carries bacteria and chemicals. Whatever happens to the surface water and groundwater upstream will eventually have an effect downstream. Even if you don't live near a river, you still have an effect on your river basin. Therefore, taking care of our river basins start in our own yards and making sure our stormwater stays clean will help keep our river basins and watersheds throughout our great state clean, too!

* Fayetteville has several Environmental Education Centers where you can learn more about the Cape Fear River Basin. They are: Cape Fear Botanical Garden, Clark Park Nature Center, Lake Rim Park, and the PWC Watershed Educational Center.

OTHER RESOURCES INCLUDE:

Bald Head Island Conservancy
www.bhic.org

Cape Fear River Basinwide Plan
portal.ncdenr.org/web/wq/ps/bpu/basin/capefear

Cape Fear River Watch
www.capefearriverwatch.org/

Carolina Estuarine Reserve Foundation
www.nccoastalreserve.net/

Morgan Creek Valley Alliance
www.morgancreek.org

NC Division of Soil and Water Conservation
www.ncagr.gov/SWC/

North Carolina Coastal Federation
www.nccoast.org

North Carolina Stream Watch
www.ncwater.org/Education_and_Technical_Assistance/Stream_Watch

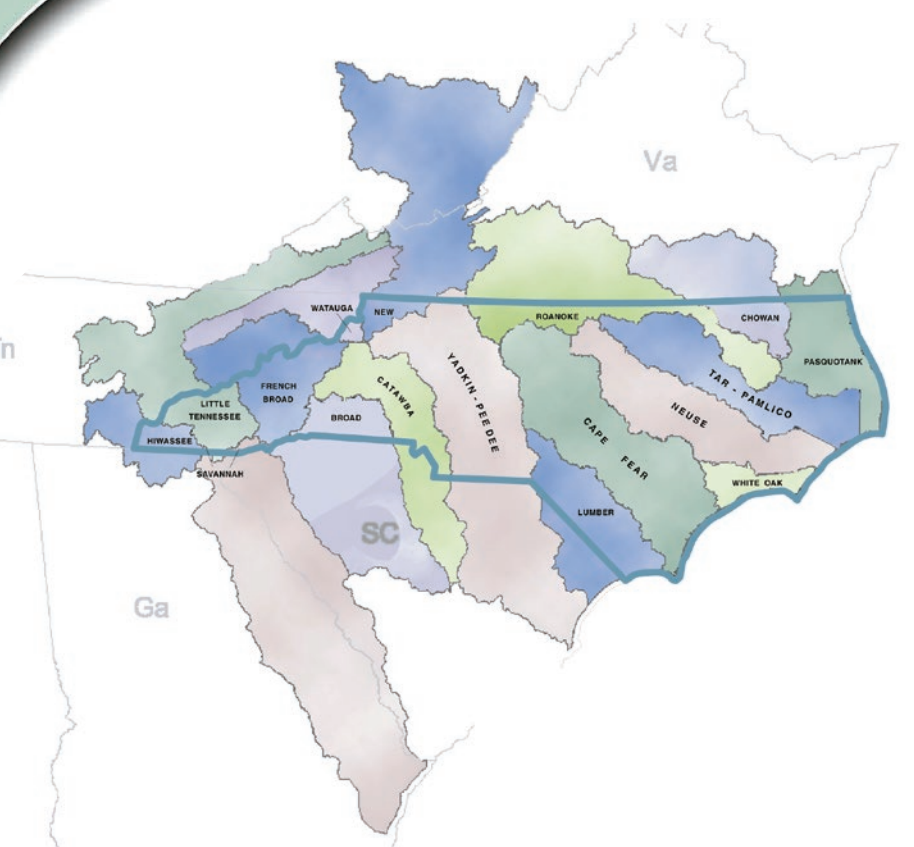
Triangle Rails to Trails Conservancy
www.trianglerails.org

Fun Facts About 'Our' River Basin

The Cape Fear River basin is the largest river basin located entirely in North Carolina.

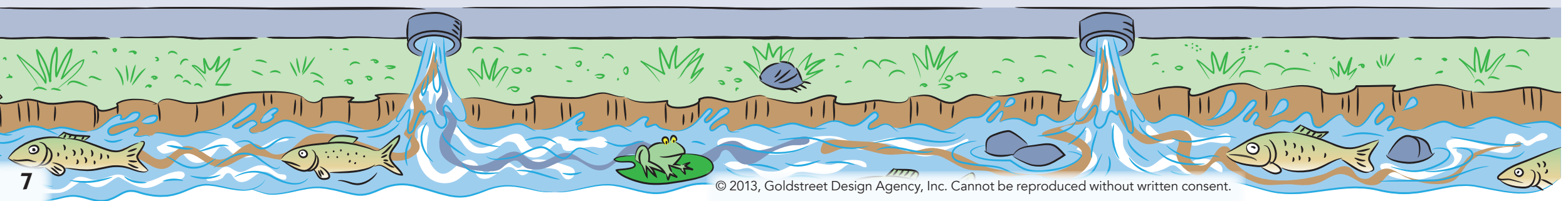
In fact, 1/4 of our state's population lives in this basin. It is home to the Shiner, an endangered minnow species that lives nowhere else in the world.

The Cape Fear River is the main tributary and name sake for the state's largest river basin. It is the only river in NC that flows directly into the ocean. The Cape Fear River is approximately 200 miles long, stretching from Jordan Lake to the Atlantic Ocean.





Locate 9 things that are POLLUTING the local stream. Cross out each activity that could cause pollution. Then, locate 6 things that are being done to PROTECT the local stream. Circle each activity that is protecting our water quality. (Answer key on back of booklet.)



MAD LIBS

Fill in each of the blank spaces with the appropriate type of word. Each blank notes what kind of word goes there, such as a noun, verb or adjective. Outside of that, the choice of word you use is entirely up to you, no matter how ridiculous it is. In fact, the more ridiculous the word, the more hilarious the outcome!

Mad Lib Clues

1. Noun _____
2. Noun _____
3. Noun _____
4. Past Tense Verb _____
5. Verb _____
6. Verb _____
7. Past Tense Verb _____
8. Past Tense Verb _____
9. Past Tense Verb _____
10. Adjective _____
11. Noun _____
12. Noun _____
13. Verb _____
14. Adjective _____
15. Past Tense Verb _____
16. Past Tense Verb _____

Match the alphabet symbols with the puzzle below to solve the decoder.

⋈	☯	🎯	🍗	🏀	☁	🚩	🪑	🍉	🎯	📺	🌀	🍃
A	B	C	D	E	F	G	H	I	J	K	L	M
☕	🧤	✉	♥	★	🌸	🥕	🐟	🧤	🌀	☀	🍃	
N	O	P	Q	R	S	T	U	V	W	X	Y	Z

 ☯ 🏀 🥕 🪑 🏀 🌸 🧤 🌀 🐟 🥕 🍉 🧤 ☕ 🥕 🧤

 🌸 🥕 🧤 ★ 🍃 🧤 ⋈ 🥕 🏀 ★ ✉ 🧤 🌀 🌀 🐟 🥕 🍉 🧤 ☕

Find your way to the end of each maze, and see how the water that enters our storm drains, comes out into our rivers and streams.

(Answers on back page.)



MAD LIBS

Using the words from the previous page, fill in the words you entered to finish the story!

One day, Ana was walking her (1)_____ and she saw a (2)_____ pouring (3)_____ into the storm drain. Ana had remembered a presentation that she had (4)_____ at school about how that was bad for the environment. So, Ana decided she was going to (5)_____ something about it! Before Ana could (6)_____ up to the truck driver, Stormee the Stormwater Pollution Fighter appeared! Ana was (7)_____! She had always heard of Stormee, but had never (8)_____ him in person. Stormee and Ana walked up to the truck driver, and boy was he (9)_____! The truck driver had never seen a big (10)_____ water (11)_____ before! Stormee and Ana began to tell the (12)_____ driver about how what he was doing was bad for the environment. They told him that storm drains lead directly to local rivers and streams, and that any pollutants that (13)_____ into the storm drains will end up there as well. This could harm fish and their habitat, and cause our drinking water to be (14)_____ and contaminated. The truck driver was (15)_____ to find this out, and (16)_____ to never dump in the storm drains again.

WATERSHED WORD SEARCH

POLLUTION	P	B	W	A	T	E	R	S	H	E	D	Q	E	R	P	Q	Z	D	Z	R	L	Q
STORMWATER	R	C	R	S	V	S	F	I	K	R	E	C	Y	C	L	E	W	K	E	A	M	W
FISH	D	L	O	P	U	T	F	T	V	P	M	T	J	N	J	B	B	T	V	I	K	L
ENVIRONMENT	P	E	Q	R	N	O	D	W	G	E	E	N	V	I	R	O	N	M	E	N	T	A
CLEAN	J	A	U	I	A	R	U	H	T	D	R	A	I	N	A	Q	U	I	F	E	R	K
WATER	H	N	N	N	T	M	O	K	A	M	V	E	Z	W	D	B	B	T	L	E	T	E
SPRINKLERS	J	G	N	K	L	W	S	C	C	H	V	K	N	H	Y	S	O	T	U	J	Y	S
DRAIN	O	B	J	L	B	A	S	I	N	R	U	N	O	F	F	T	D	N	U	L	I	K
RIVER	F	A	Y	E	T	T	E	V	I	L	L	E	S	O	L	U	T	I	O	N	M	A
WATERSHED	W	K	T	R	A	E	G	B	A	F	U	Z	G	X	A	G	D	U	Z	J	E	B
BASIN	Z	N	U	S	H	R	P	O	L	L	U	T	I	O	N	B	F	I	S	H	C	E
SOLUTION	M	K	S	W	G	B	D	X	M	J	R	A	G	L	B	E	Q	W	A	T	E	R
FAYETTEVILLE																						
RUNOFF																						
LAKES																						
RECYCLE																						
RAIN																						
AQUIFER																						

Everything that we do ultimately affects water quality; from watering our flowers to walking our dogs. Anything that enters our storm drainage system flows **untreated** to the water bodies we use for fishing, swimming and providing drinking water. Polluted stormwater runoff is a big threat to our rivers, lakes and streams!

Think about the things that you do every day and remember that you can be a protector of our environment. What can you change that will help you become a protector of our environment?



Teachers / City Residents:

If you would like a Hands-On Pollution Demonstration for a group, or an informational presentation on Stormwater, please contact us at 910-433-1613.

Check us out on the web! www.cityoffayetteville.org/stormwater

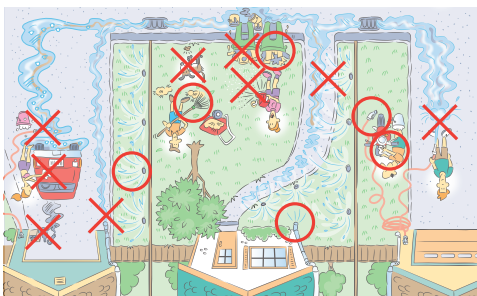


433 Hay Street
Fayetteville, NC 28301
www.cityoffayetteville.org/stormwater
(910) 433-1613



Answers to puzzles

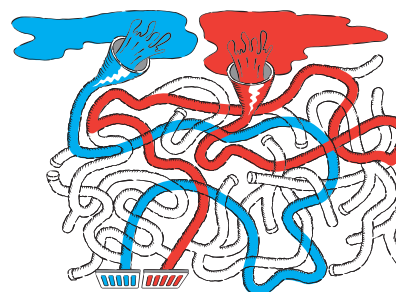
Answer for Seek and Find



Answer for SYMBOL DECODER

STORMWATER POLLUTION
BE THE SOLUTION TO

Answer for MAZE



Answers for WORDFIND

