

WATERDROPS

Watersheds

A Southwest Florida Water Management District Water Resources Newsletter for Grades 3-5

Hello Readers!

This issue of **WaterDrops** is on the subject of **watersheds**. A **watershed** is an area of land that **water** flows across as it moves toward a common body of water, such as a stream, lake, river or coast. All the rain that falls in a **watershed** drains to the same place. We all live in a **watershed**. To help you learn more about **watersheds**, we have included a feature story, articles, activities and games. When you finish this issue, we hope you will teach others about **watersheds** and why we need to protect them.

In other issues of **WaterDrops**, you'll learn more about how important **water** is to us. Don't forget to send in the activity on the back page for a free prize!

Happy Splashing!

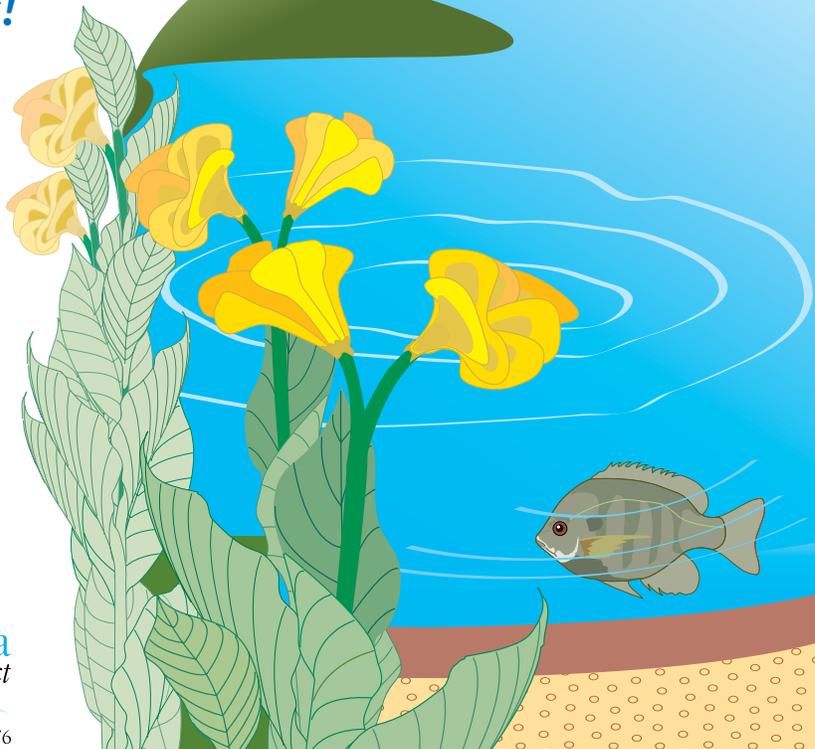
Water Drips & Drops

Did you know that the largest **watershed** in the United States is the Mississippi River **watershed**? This **watershed** includes 31 states and two Canadian provinces. Can you locate this **watershed** on a map?



Southwest Florida
Water Management District

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Water Drips & Drops

Feature Story

Take It Home

Water Cycle Wanda

Water in Our World

Games & Puzzles

What's Wet on the Web!

PROTECT OUR WATERSHED

When Paul, Todd and Maggie arrived at the park, they quickly got off their bikes. Then they locked them to the bike rack next to the path that led to the wetlands and Parkside Pond.

Maggie looked at the big sign posted at the path entrance and read it aloud. "Protect your watershed. Come to the pond cleanup on Saturday!"

"What's a watershed?" asked Paul. "I can see the damp, soggy wetlands and the pond. I don't see a shed anywhere."

"It's an area of land that water flows across as it moves toward a common body of water," said Maggie. "My teacher says that we all live in a watershed. She said to think of a watershed sort of like a neighborhood. That's because everyone who lives in a watershed should help take care of it."

Paul thought about it for a moment and then asked, "Is Parkside Pond part of the watershed?"

"Yes, absolutely," said Maggie. "The wetlands near the pond are part of the watershed too. And so is the creek that runs by the pond that feeds into the stream, which flows into the river that's a few miles away."

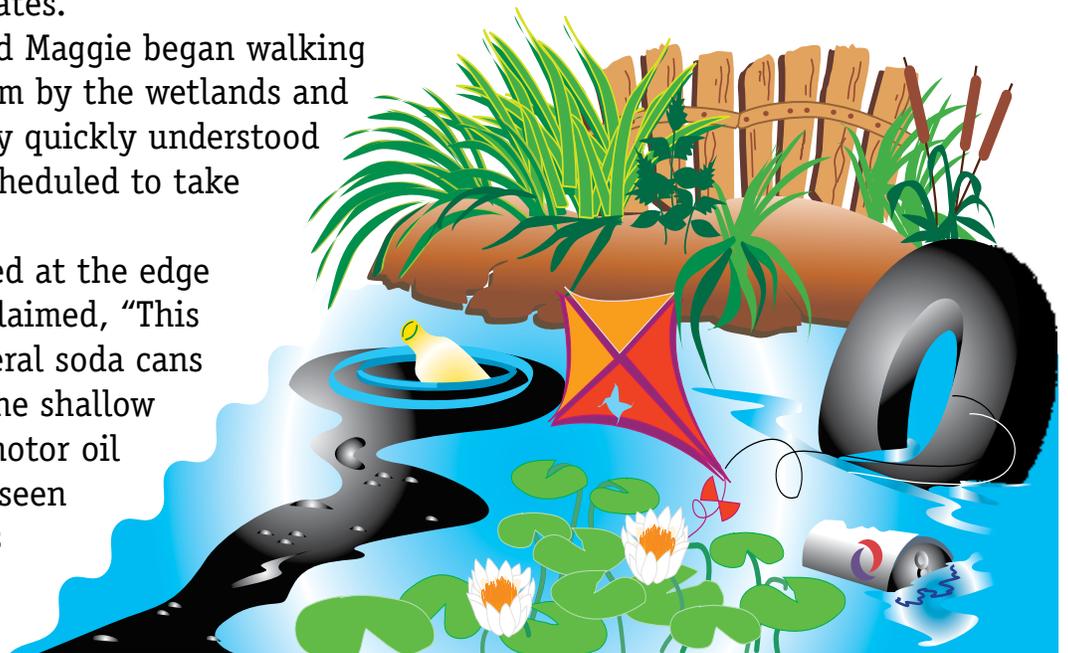
"Whew! That's a lot of different water bodies," exclaimed Paul.

Todd pointed at the puddle next to his bike and asked, "Is the puddle part of the watershed?"

"Yes, even the puddle," said Maggie. "It's a mini-watershed. The water from the area around it collects there and either flows to a bigger water area, soaks into the ground or evaporates."

As Paul, Todd and Maggie began walking the path that led them by the wetlands and toward the pond, they quickly understood why a cleanup was scheduled to take place.

When they arrived at the edge of the pond, Paul exclaimed, "This place is a mess!" Several soda cans and bottles littered the shallow water. A few empty motor oil cans could be seen in the bushes nearby. An



abandoned kite, several plastic cups and a variety of candy wrappers floated near a group of **water** lilies. An old fishing pole with its hook and line still attached was wedged between two rocks in the **water**.

“Look over there!” exclaimed Todd. “Someone even left an old bicycle tire. What do people think this is — the city dump? People who do this aren’t being very good **watershed** neighbors.”

It was clear to all three of them that people who visited the area had created this horrible condition. They all looked at each other and sighed. Then they continued walking around the pond and silently thought about how peoples’ actions can harm the environment.

“What do you think all this nasty stuff does to the **water**?” asked Paul.

“It makes it unhealthy, that’s for sure,” responded Maggie. “I bet the fish don’t appreciate trying to survive among all these pollutants. Just think about what happens to the creatures who live in the wetlands. Not to mention what happens when **water** overflows into the creek, the stream and finally the river. All these areas become polluted too.”

“I’m glad there is a cleanup on Saturday,” said Paul. “We need to let others know about it.”

“It’s going to take the help of a lot of volunteers to clean this place up,” said Todd.

“Let’s tell all our neighbors and encourage them to come to the cleanup,” said Maggie. “After all, a **watershed** is like a neighborhood. And it’s everyone’s responsibility to keep it clean and healthy.”

Pretend that your school has decided to help your local **watershed** by having a school area cleanup. List several things that you would expect to find. Suggest ways to encourage people to keep the area clean so that everyone may enjoy it.



Take It Home

Make Your Own Watershed — It Can Be Fun!

Here is an easy experiment that you can do at home.

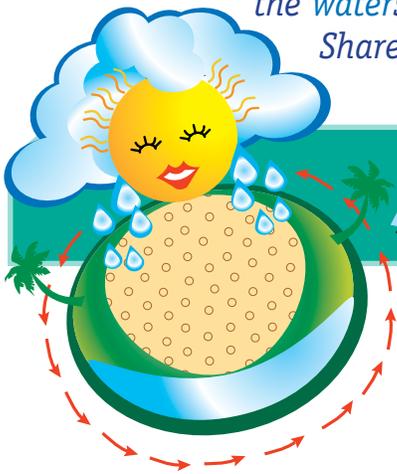


- Materials**
- sheet of white paper
 - shallow pan
 - spray bottle of water
 - colored water-based or washable markers

Directions

1. Take the sheet of paper and crumple it up. Next, smooth it back out somewhat, leaving creased areas higher.
2. Use your colored markers to shade different creased areas. You may want to use different colors to represent a variety of pollutants such as fertilizer, oil, pesticides, litter, etc.
3. Lay the paper out on the shallow pan and shape it so that the creased lines appear as elevated land areas.
4. Use the spray bottle of water and gently spray the top of the watershed. Keep spraying the paper until the colors begin to flow.
5. This is a watershed in action!

Take notes on what you observed in this experiment. What happened at the lowest point of the watershed? Did the different pollutants mix and collect in a common area? Share your findings with your class.



Ask Water Cycle Wanda

Terry asks: Are all watersheds the same size?
What's the smallest watershed?



Water Cycle Wanda: Watersheds exist in all shapes and sizes. Smaller watersheds can be part of larger watersheds. You already learned that the Mississippi River watershed is the largest watershed in the United States. The smallest watershed that I can think of is a puddle! It is a land area covered with water that may either evaporate, soak into the ground or overflow into a bigger water body. After the next heavy rainfall, ask your teacher to take your class on a walk around the school grounds to see where the water is collecting. Can you tell why the water collects in a particular place?



FRESHWATER BODIES

There are many kinds of freshwater bodies that can be part of a watershed. Study the illustration below. Then write the number of the description below that matches each water body.

- river _____
- creek _____
- wetlands _____
- pond _____
- lake _____



The Many Shapes and Sizes of Water Bodies

1. It is a small body of flowing water. It is smaller than a stream.
2. It is a small inland body of fresh water. It is smaller than a lake.
3. It is a large inland body of fresh water. It can be part of a river system.
4. It is a body of flowing water. It is larger than a creek or stream.
5. This area may include marshes, swamps, wet meadows and small ponds.

Answers to *WaterDrops* activities are printed in the Teacher's Guide. View or order free copies of the Teacher's Guide and other *WaterDrops* issues online at WaterMatters.org/publications/.

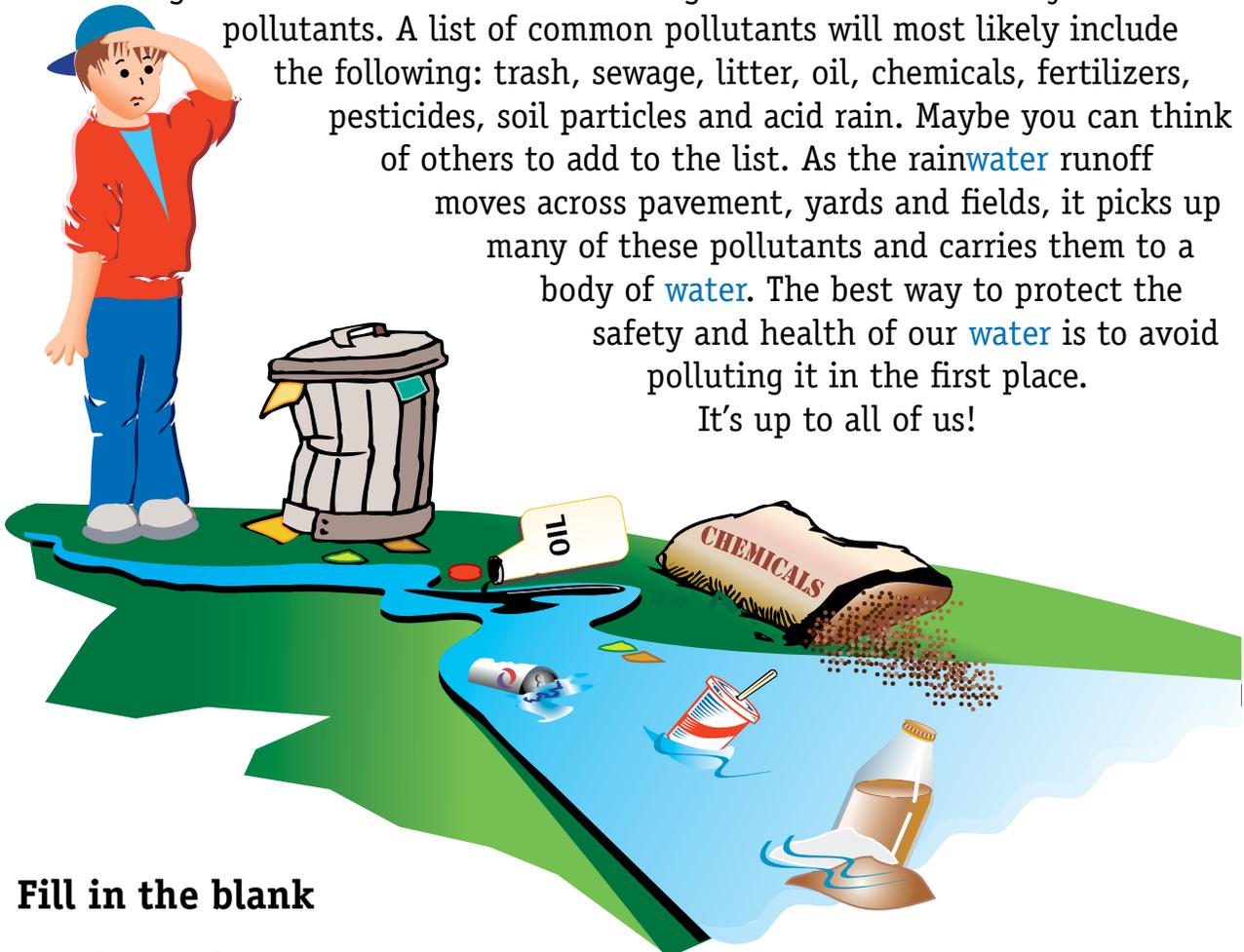
Water in Our World

POLLUTANTS

Polluted Water Means a Polluted Watershed

Polluted **water** can cause a **watershed** to become unhealthy. Pollutants are materials that cause something to become unclean or impure. Most pollutants get into our **water** because of things we do. There are many kinds of pollutants. A list of common pollutants will most likely include the following: trash, sewage, litter, oil, chemicals, fertilizers, pesticides, soil particles and acid rain. Maybe you can think of others to add to the list. As the **rainwater** runoff moves across pavement, yards and fields, it picks up many of these pollutants and carries them to a body of **water**. The best way to protect the safety and health of our **water** is to avoid polluting it in the first place.

It's up to all of us!



Fill in the blank

Complete each sentence by writing the correct word.

Rain**water** runoff picks up _____ as it moves toward a larger body of **water**.

To protect our **water**, _____ should avoid polluting it.

There are _____ kinds of pollutants that can cause our **water** to become unsafe and unhealthy.

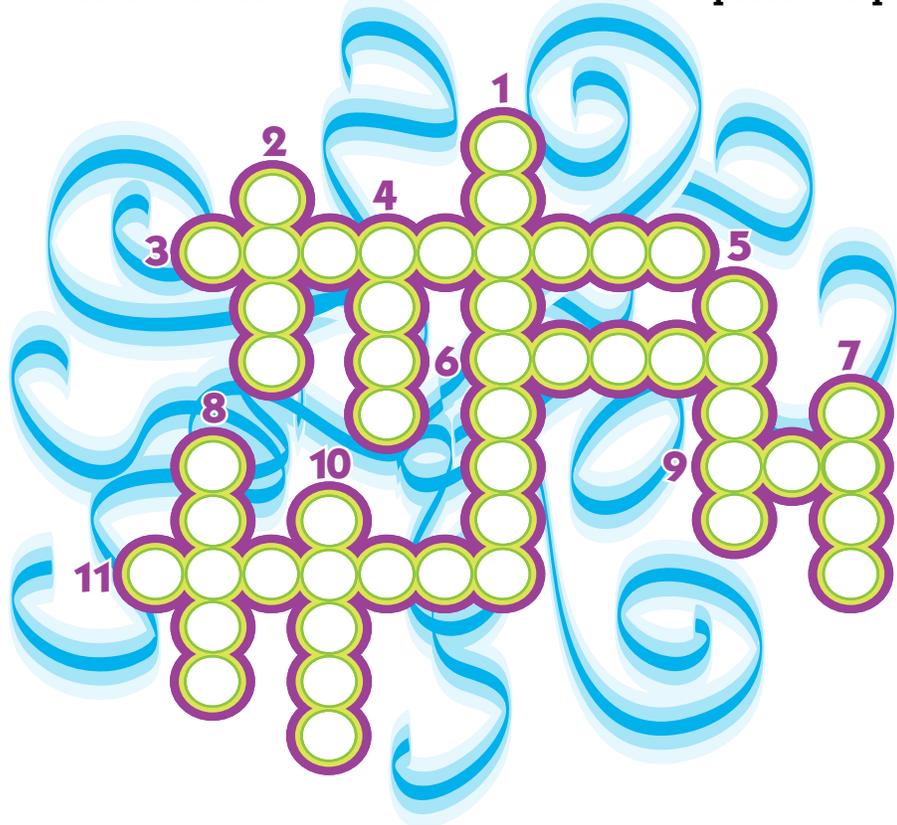


WATERSHED CROSSWORD PUZZLE

Use the clues and the word bank to complete the puzzle.

Word Bank

watershed
river
wetland
pollutant
fresh
pond
lake
creek
sea
salt
clean



ACROSS

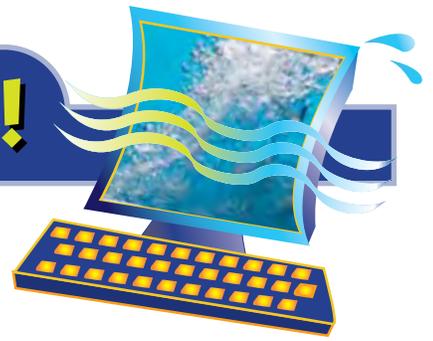
3. A _____ is a material that causes something to become unclean or impure.
6. A body of flowing **water** that is larger than a creek or a stream is a _____.
9. A _____ is a large body of **water** that contains salt **water**.
11. An area that may have swamps, marshes, small ponds and wet meadows is called a _____.

DOWN

1. A _____ is an area of land that **water** flows across as it moves toward a stream, lake, river or coast.
2. A small inland body of fresh **water** that is smaller than a lake is called a _____.
4. A _____ is a large inland body of fresh **water**.
5. A **water** body that does not contain salt is called a _____ **water** body.
7. An ocean contains _____ **water**.
8. A body of flowing **water** that is smaller than a river or stream is a _____.
10. To protect the quality of our **watershed**, we must keep it _____ and healthy.



What's Wet on the Web!



Here are three [water](#) web sites to visit. Ask your teacher or parent to help you if you have any difficulty exploring these sites.

- Visit WaterMatters.org/kids for more information about [water](#) and [watersheds](#).
- Visit epa.gov/surf to learn more about [watersheds](#).
- Visit www.epa.gov/kids/water.htm for some cool [water](#) activities.



1 = a	14 = n
2 = b	15 = o
3 = c	16 = p
4 = d	17 = q
5 = e	18 = r
6 = f	19 = s
7 = g	20 = t
8 = h	21 = u
9 = i	22 = v
10 = j	23 = w
11 = k	24 = x
12 = l	25 = y
13 = m	26 = z

FIND THE HIDDEN WATER MESSAGE

23 1 20 5 18 19 8 5 4 19 1 18 5 12 9 11 5
 14 5 9 7 8 2 15 18 8 15 15 4 19 12 5 20 19
 11 5 5 16 20 8 5 13 3 12 5 1 14 !

Mail your message to us! We will send you a prize!

Name _____

Address _____

City _____ State _____ ZIP _____

County _____ School _____

Teacher _____ Grade _____

Send to: **Youth Education
Communications Department**
 Southwest Florida [Water](#) Management District
 2379 Broad Street, Brooksville, FL 34604-6899



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