

WATERDROPS

Watershed Issue

A Southwest Florida Water Management District Water Resources Newsletter

Hello Readers!

This issue of **WaterDrops** is on the subject of **watersheds**. A **watershed** is an area of land that **water** moves across toward 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 that 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 **water** drop notepad!

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?



Splash! is a program available from the Southwest Florida Water Management District. Splash! helps us learn about our water resources. Let's help protect our water supply now and in the future.

Water Drips & Drops

Feature Story

Take It Home

Water Cycle Wanda

Water in Our World

Games & Puzzles

What's Wet on the Web!



Feature Story

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. But, I don't see a shed anywhere."

"It's an area where water collects and then sometimes moves to a bigger 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.

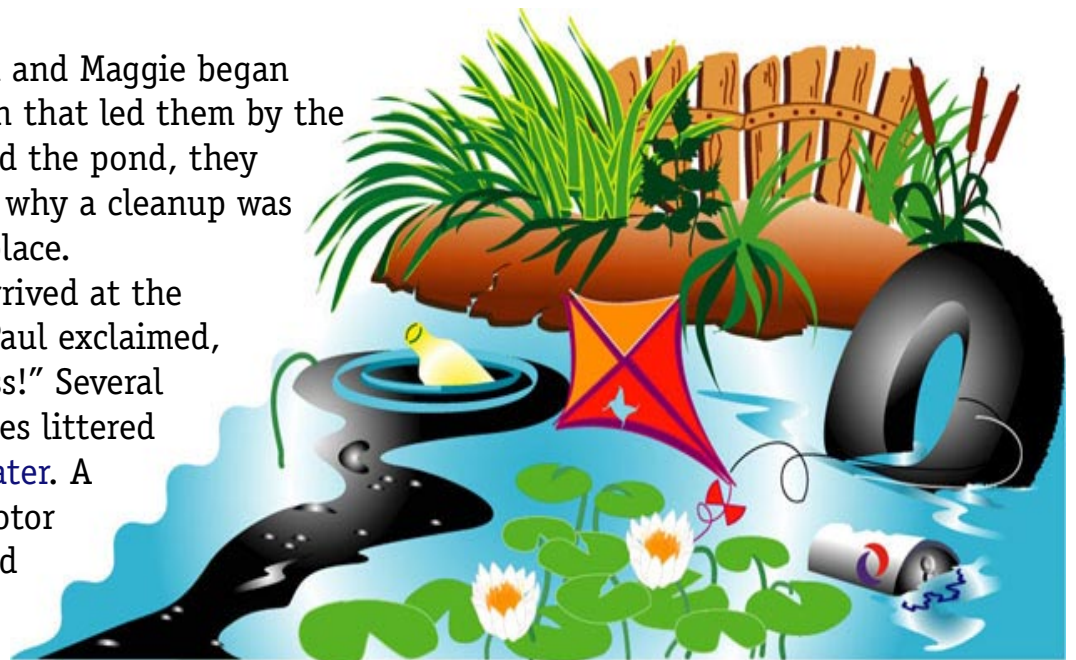
Todd pointed at the puddle next to his bike and asked, "Is the puddle part of the watershed?"

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

As Paul, Todd and Maggie began walking on 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, too.”

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

“Let’s tell all of 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 have 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.

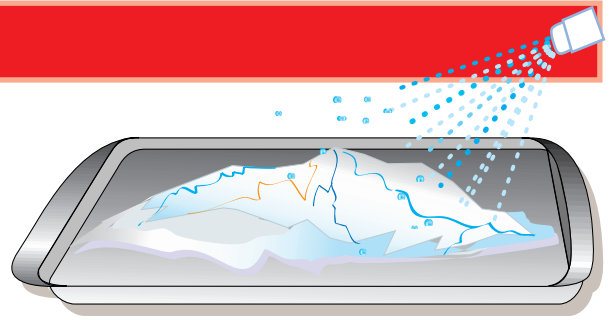
Materials

- 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 other 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 it looks like a watershed. Use the creased lines to show elevated land areas.
4. Use the 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?

Water in Our World

FRESH WATER BODIES

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

Labels:

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. The area is very close to or level with the **water** table, which is why it is often wet.

Answers to *WaterDrops* activities are printed in the Teacher's Guide. Visit the Educators section at www.swfwmd.state.fl.us to view the Teacher's Guide, or request a copy by calling 1-800-423-1476, ext. 4757 (Florida only).

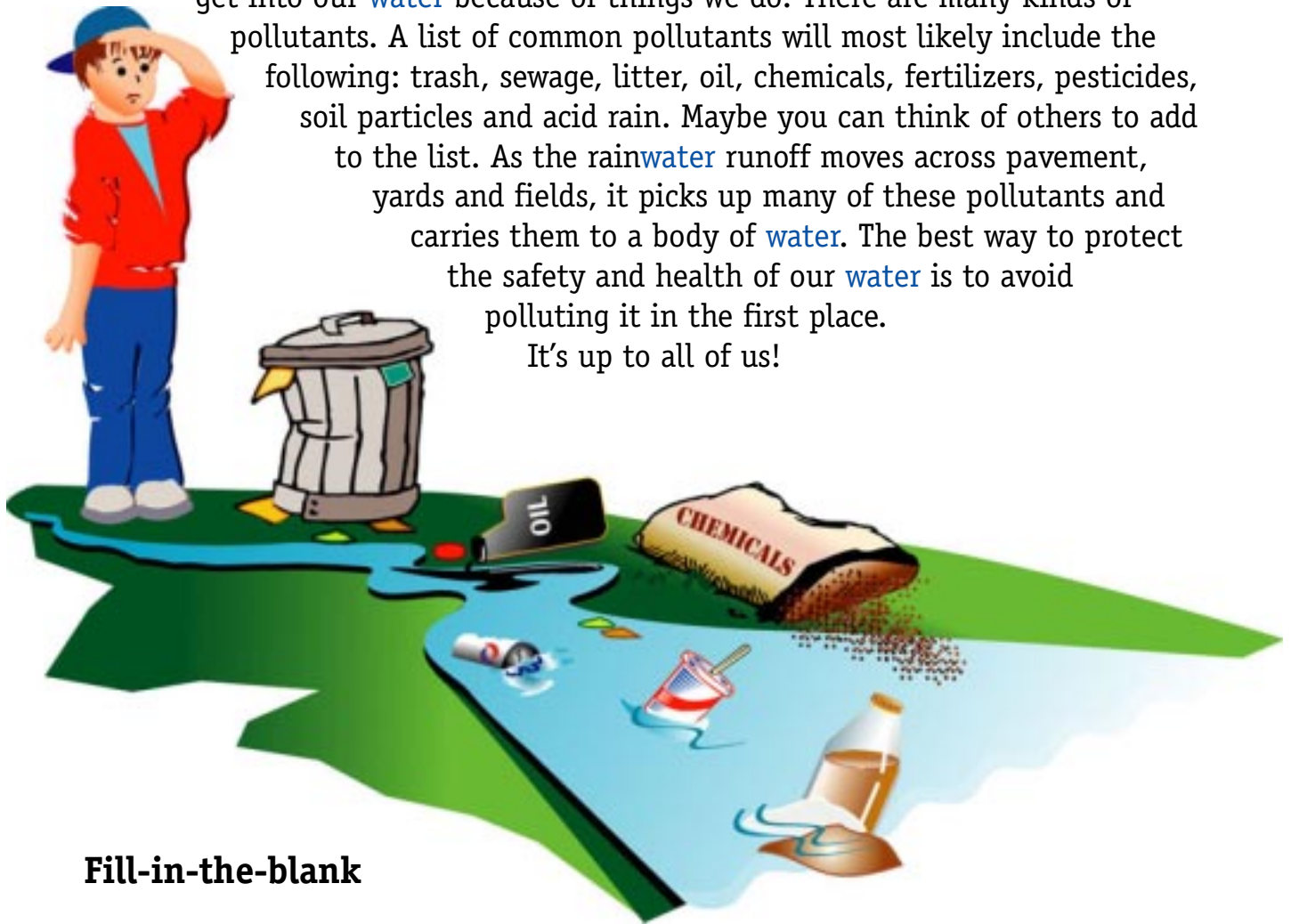
Water in Our World

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.

Rainwater 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.

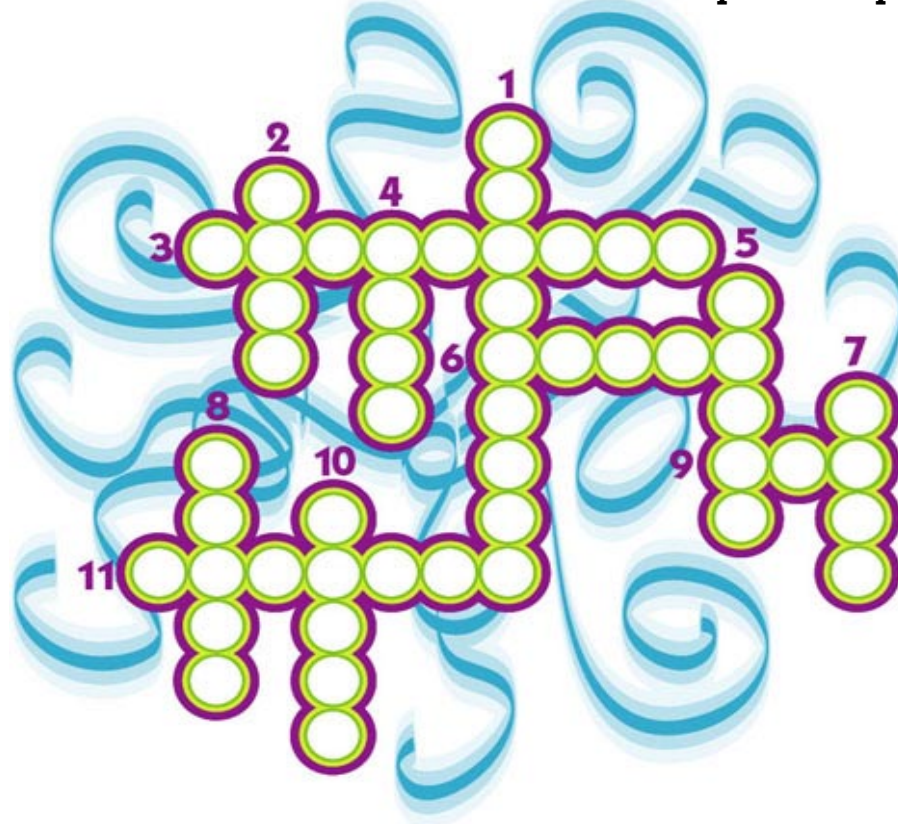


WATERSHED CROSSWORD PUZZLE

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

Word Bank

watershed
river
wetland
pollutant
fresh
pond
lake
creek
sea
salt
clean



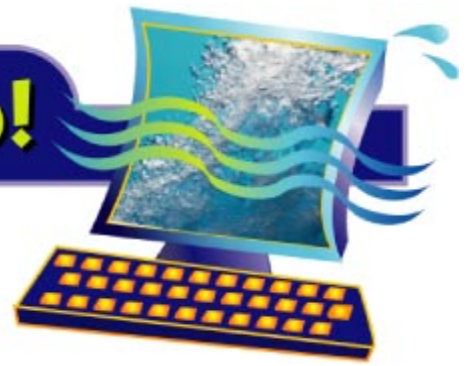
ACROSS

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 the Kids' section at www.swfwmd.state.fl.us to see all the *WaterDrops* issues.
- Visit www.epa.gov/surf/states/FL to learn more about **watersheds**.
- Visit www.epa.gov/kids/pollutiondrawing.htm to see three art galleries. Try your artistic skills and create a **watershed** drawing! Submit your drawing with a **water** message for display on this *Office of Water* Web site. For extra fun, have your class submit drawings that show what you have learned about **watersheds**.



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Mail your message to us! We will send you a **water drop notepad!**



Name _____

Address _____

City _____ State _____ ZIP _____

Phone _____ County _____

School _____ Teacher _____ Grade _____

Send to: **In-School Education**
Communications and Community Affairs Department
 Southwest Florida **Water** Management District
 2379 Broad Street, Brooksville, FL 34609-6899



If a disabled individual wishes to obtain the information contained in this document in another form, please contact the Communications Department at (352) 796-7211, extension 4757; TDD only 1-800-231-6103 (FL); fax (352) 754-6883; Suncom 628-4150 or view our Web site on the World Wide Web at <http://www.swfwmd.state.fl.us>

Southwest Florida
Water Management District

