



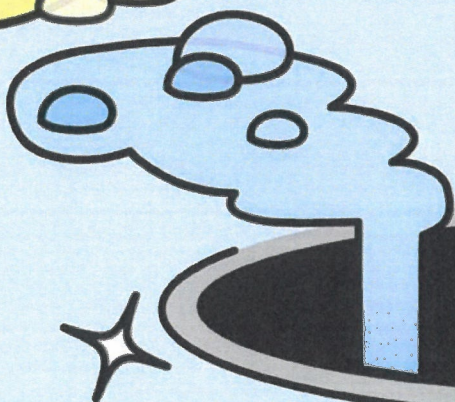
Northeast Ohio
Regional Sewer District

presents

Wally Waterdrop's

where does it go?

Activity book



I'm Wally!
Follow me and
I'll show you!



Northeast Ohio Regional
Sewer District

Protecting Your Health and Environment

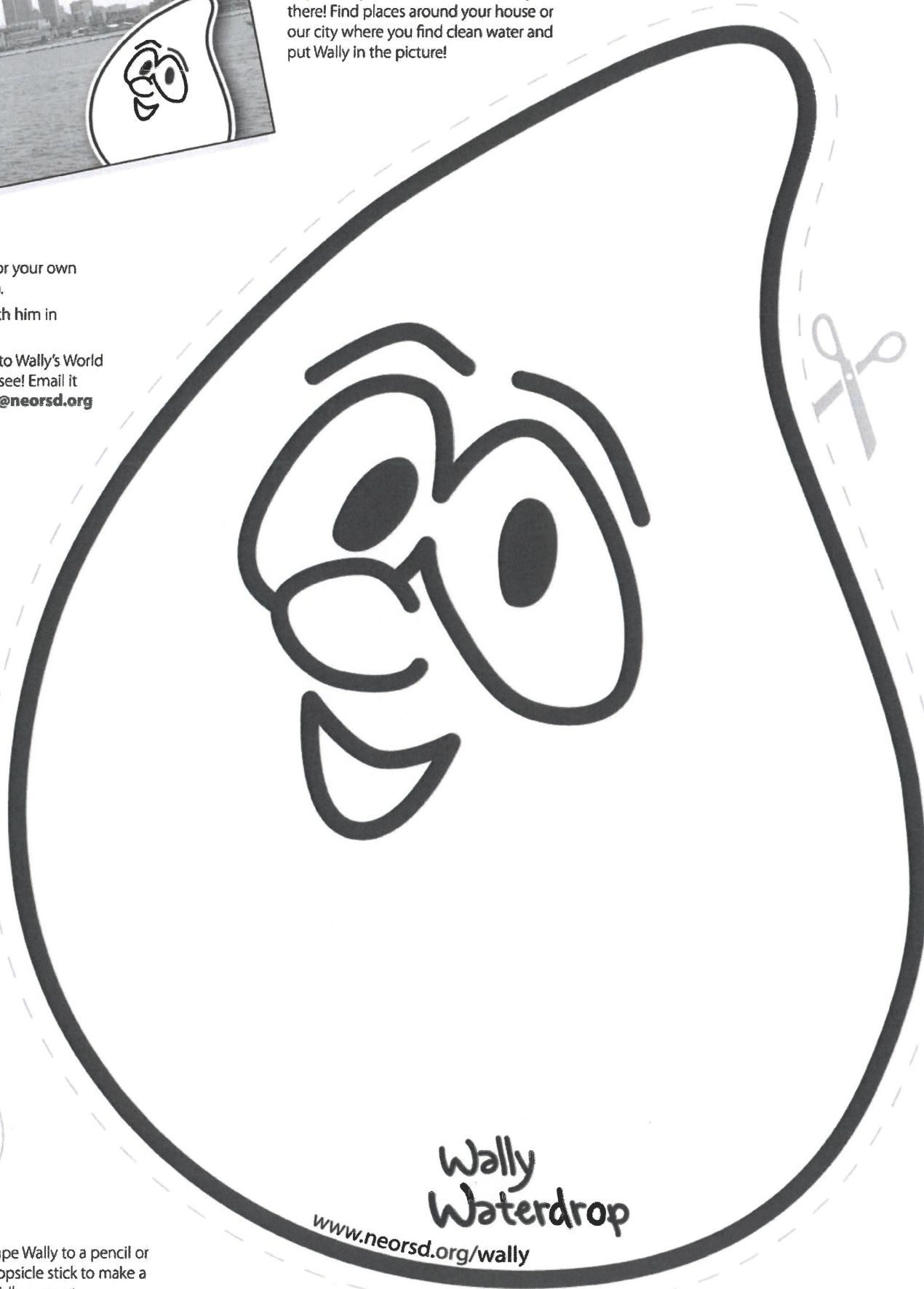


Where's Wally?



Anywhere you see clean water, Wally is there! Find places around your house or our city where you find clean water and put Wally in the picture!

- 1.) Cut out and color your own Wally Waterdrop.
- 2.) Take a photo with him in the picture.
- 3.) Post your photo to Wally's World for the world to see! Email it to wallysworld@neorsd.org



Tape Wally to a pencil or popsicle stick to make a Wally puppet.

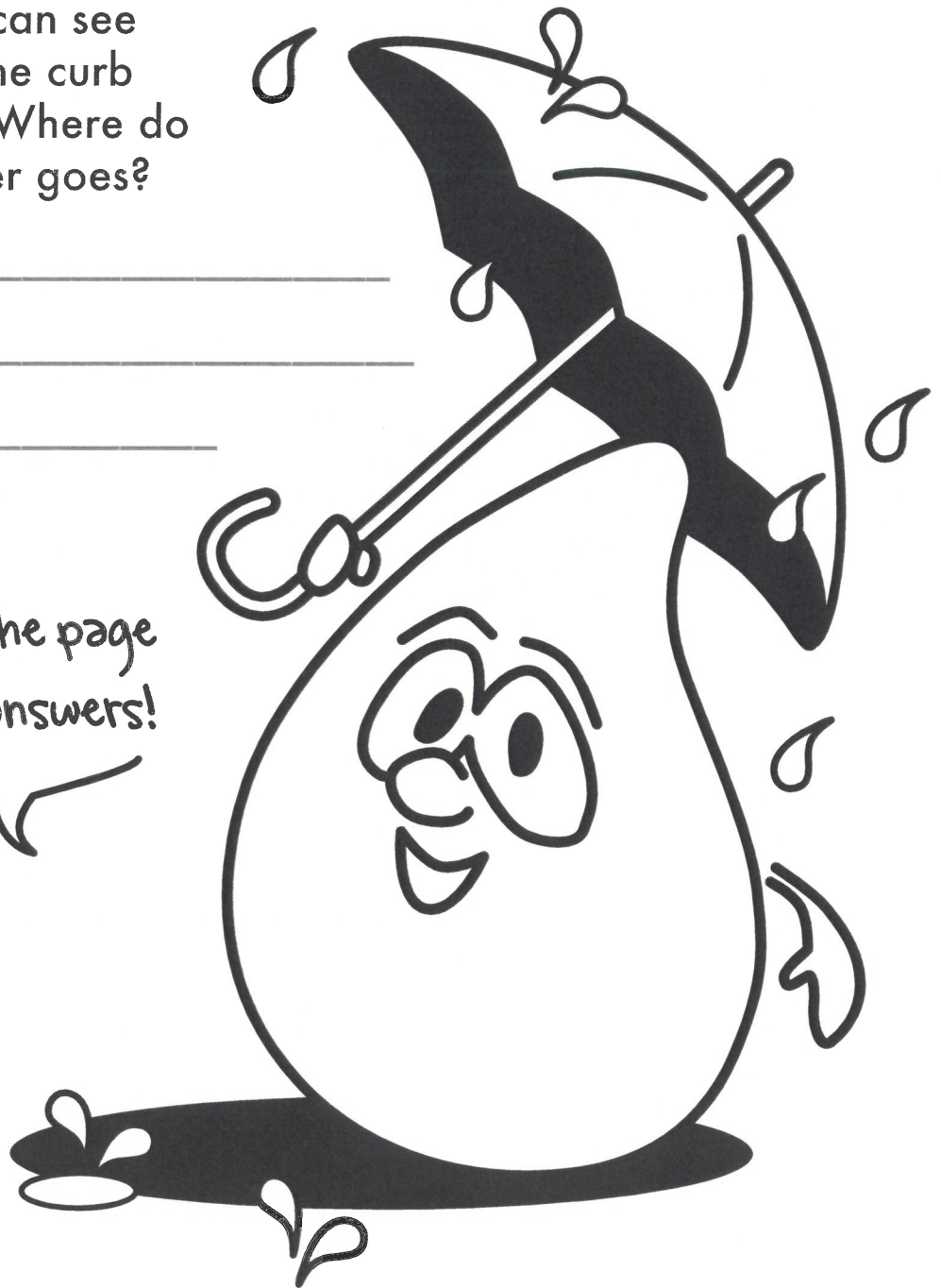
Where does it go?

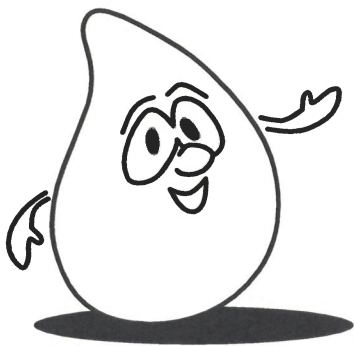
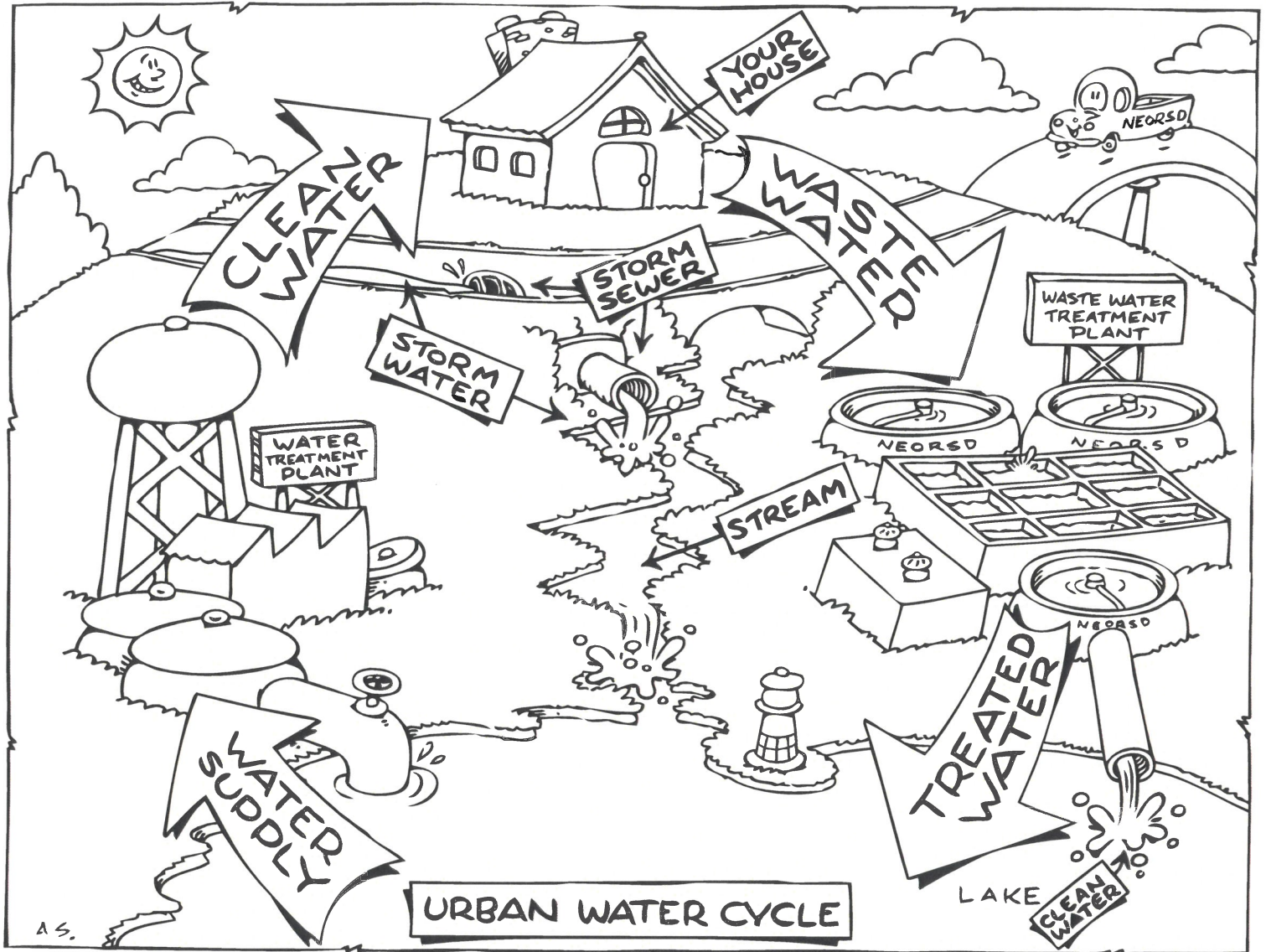
Water is all around us. It falls from the sky, runs in rivers, and flows in our sinks and down the drain, but where does it all go?

When you flush your toilet, where do you think all the dirty water goes? _____

After it rains, you can see rain water along the curb and on the street. Where do you think that water goes?

Turn the page
for answers!





Go with the flow: How the water cycle works

In cities like Cleveland, and others across Northeast Ohio, water moves in a cycle called the *urban water cycle*. In our area, our water comes from Lake Erie and flows back to Lake Erie after it has been cleaned.

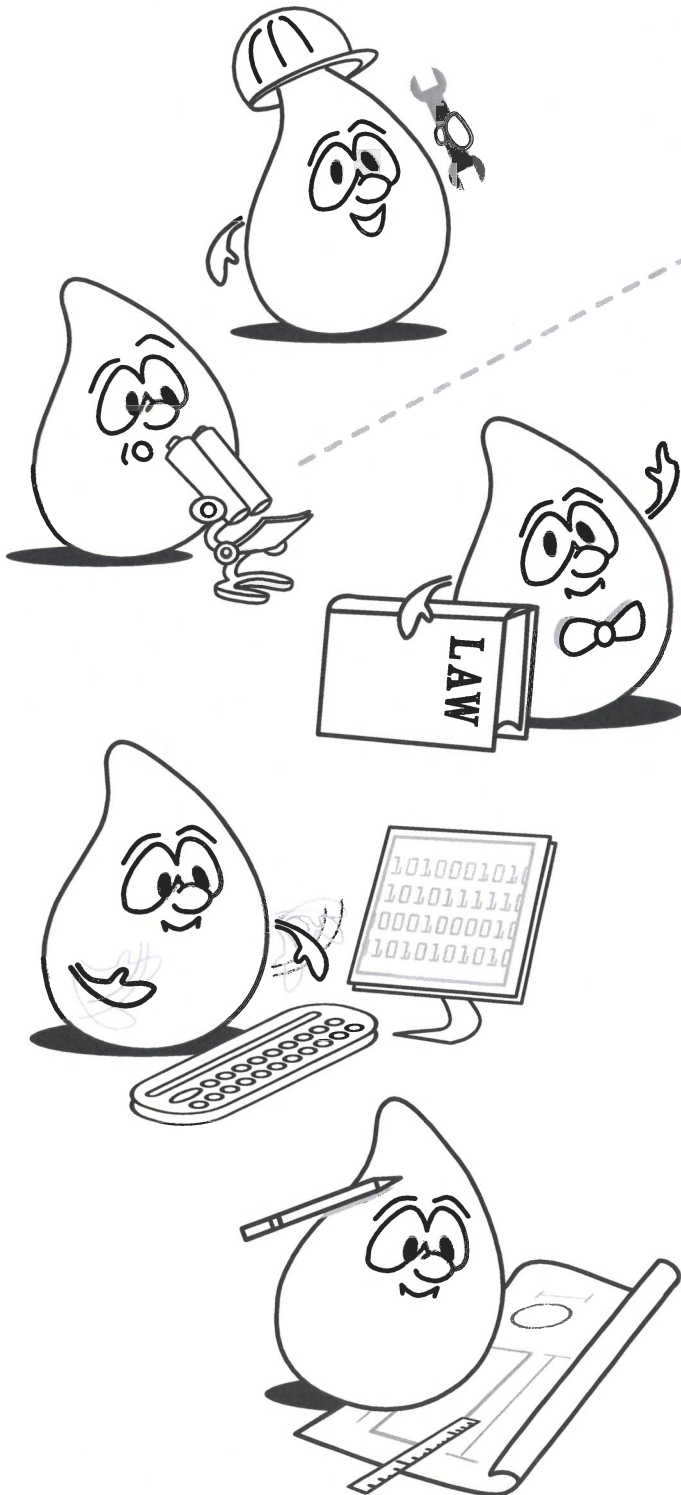
Look at Wally's urban water cycle and answer:

Where does the water in your house come from? _____

Who cleans the water coming from your house? _____

Who works with Wally?

It takes many people doing many jobs to keep Lake Erie and the Cuyahoga River clean. Look at the clothes Wally is wearing and the tools he is using. *Match his picture with his job.*



Scientist

A scientist can work in a laboratory.

Maintenance worker

A maintenance worker can fix broken pipes.

Engineer

An engineer can draw pictures of pipes so other people can build them.

Lawyer

A lawyer can study rules that help keep water clean.

Computer programmer

Many jobs need computers. A computer programmer can make computers work faster to help people do their jobs.

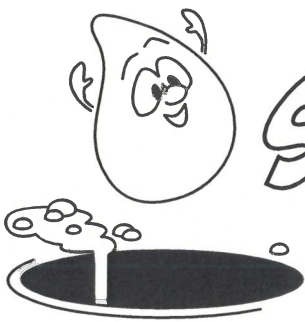


How many people work for the Sewer District?

The Sewer District has 600 employees doing more than 200 different jobs.

How does dirty water get clean?

A wastewater treatment plant cleans dirty water, and it takes many steps to clean water safely.



START HERE!

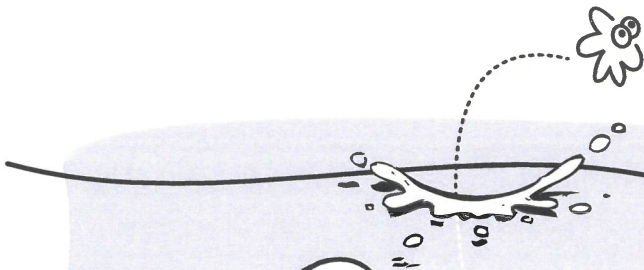
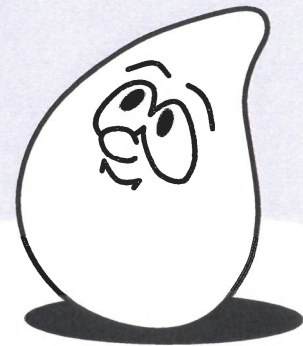


Then draw a line connecting the stars in order from start to finish. Then turn your book upside down for the correct answer!



"Secondary"

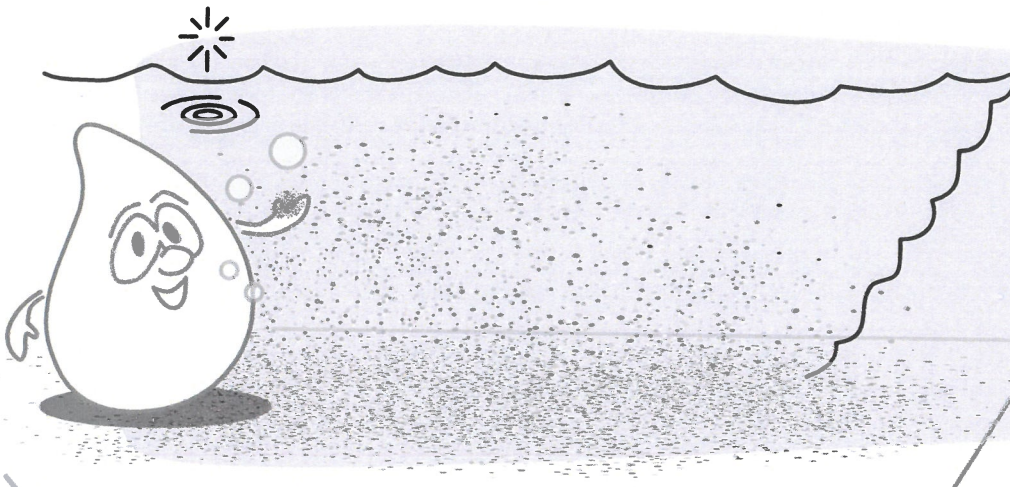
During secondary treatment, tiny helpers called *microorganisms* eat waste that has been dissolved in the water.



"Disinfection"

Disinfection removes germs called *bacteria* right before the water goes back to our river and lake.

Turn your book upside down for the answer!



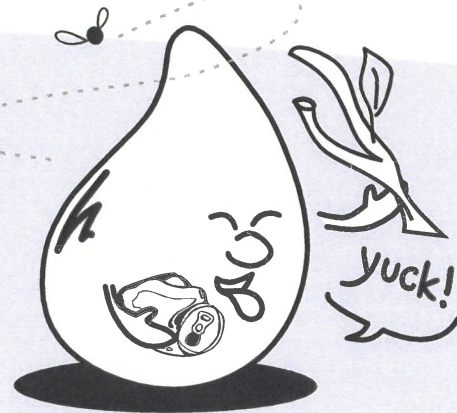
“Primary”

Primary treatment slows the water down to let solids sink to the bottom and grease float to the surface.



“Preliminary”

Preliminary treatment removes debris like cans, leaves, and rocks from the water.



WALLY MADE IT!

Back to Lake Erie,
safe and sound!



Wally's Words

Can you find these clean-water words?

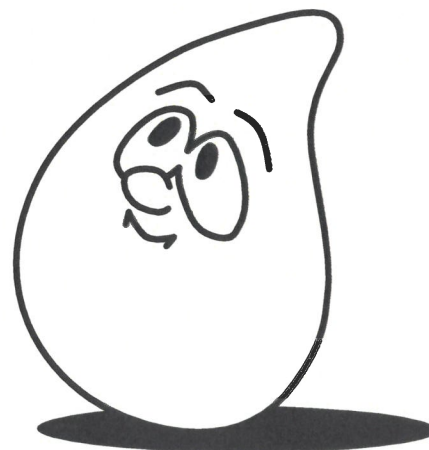
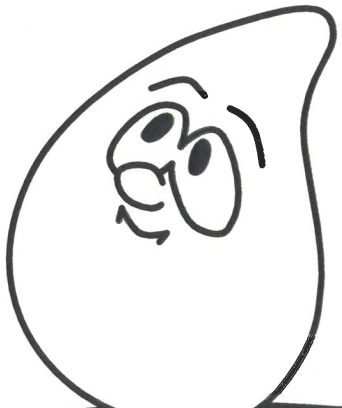
BEACH
CLEAN
CYCLE
ENVIRONMENT
HEALTH

LAKE
RAINFALL
REGIONAL
RESTORATION
RIVER

SEWER
STREAM
TREATMENT
WATER
WATERSHED

W	C	E	A	M	M	T	A	W	L	A	K	E	K	E
A	J	N	J	R	E	V	I	R	R	E	C	A	L	J
T	J	V	B	S	X	D	S	G	W	V	R	L	L	Y
E	L	I	K	X	B	V	F	U	V	E	L	V	A	U
R	O	R	H	E	A	L	T	H	S	M	B	N	F	T
Y	S	O	D	T	N	E	M	T	A	E	R	T	N	P
D	X	N	S	E	J	S	O	V	A	F	L	A	I	Y
W	W	M	U	R	H	R	T	C	N	A	X	E	A	J
Q	N	E	N	I	A	S	H	R	N	A	L	Q	R	R
Y	X	N	L	T	V	X	R	O	E	C	E	V	R	E
O	A	T	I	X	K	M	I	E	Y	A	E	L	B	W
J	N	O	H	C	K	G	J	C	T	H	M	T	C	E
O	N	V	L	X	E	N	W	T	Z	A	I	M	X	S
S	D	H	A	R	A	L	V	E	H	M	W	P	W	U
S	Y	P	I	A	P	E	H	N	D	R	U	F	U	E

How many times do you use water every day? Write down every time you use water at home or at school in one day.

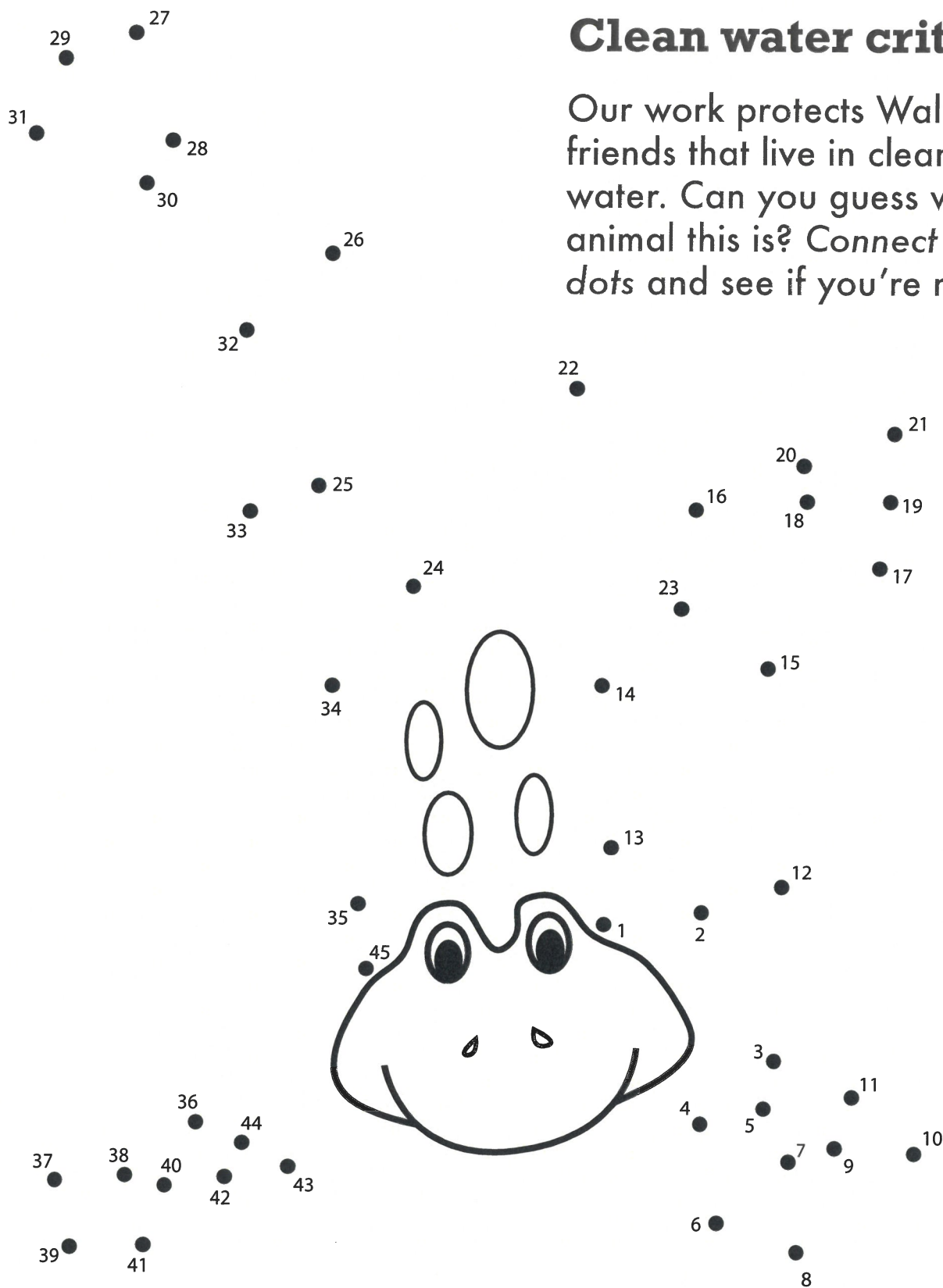


In the United States, every person uses about 80 gallons of water every day for activities like washing, cleaning, and cooking!



Clean water critters

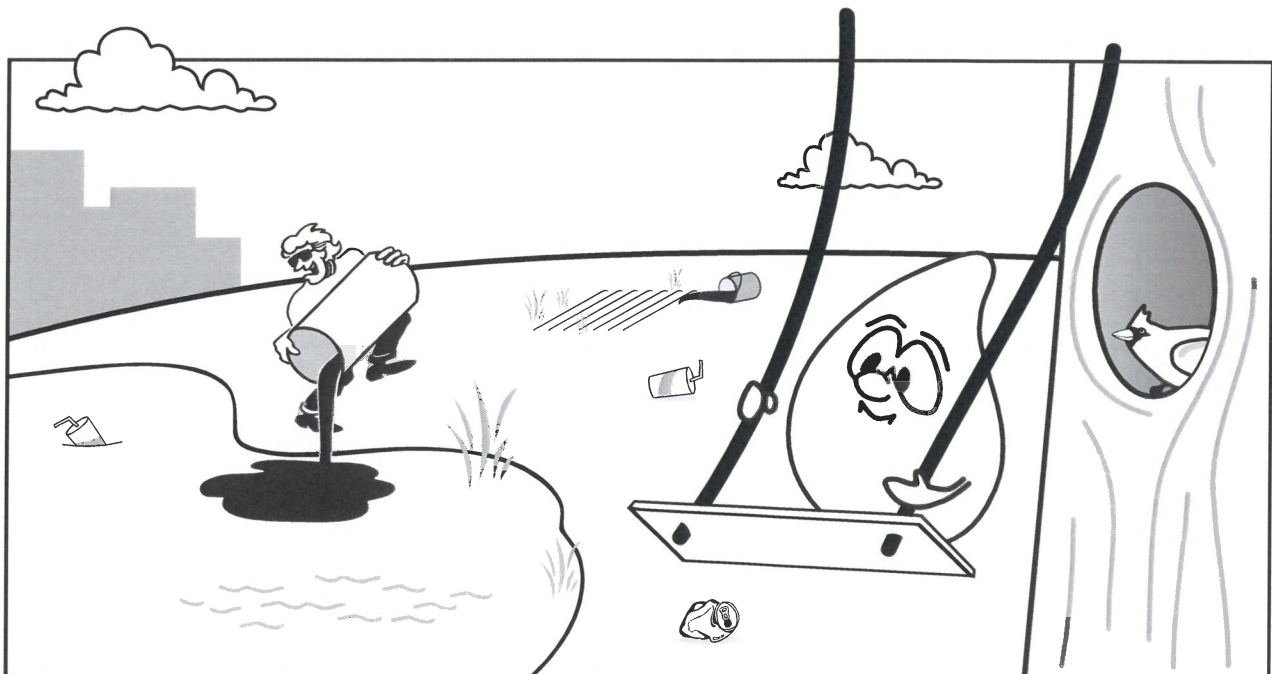
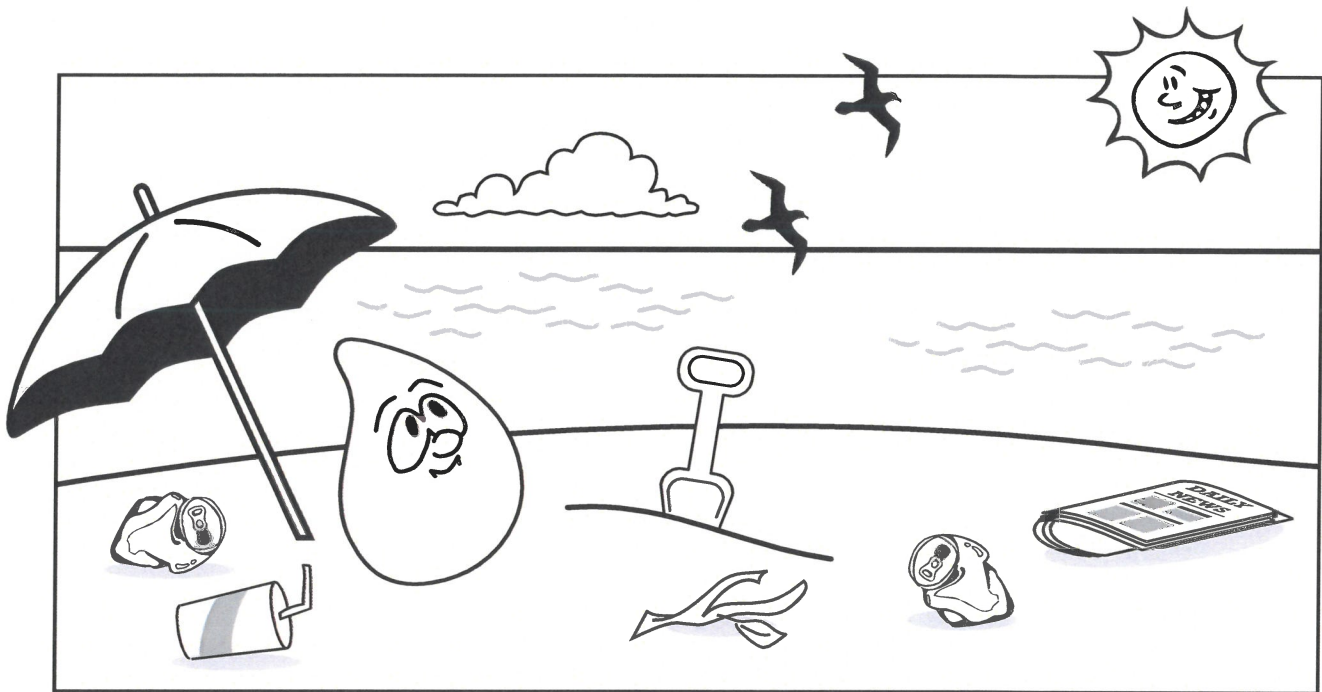
Our work protects Wally's friends that live in clean water. Can you guess what animal this is? *Connect the dots* and see if you're right.



The Northeast Ohio Regional Sewer District studies fish to understand how healthy a stream is. We collected more than 47 different species of fish on the Cuyahoga River in 2007!

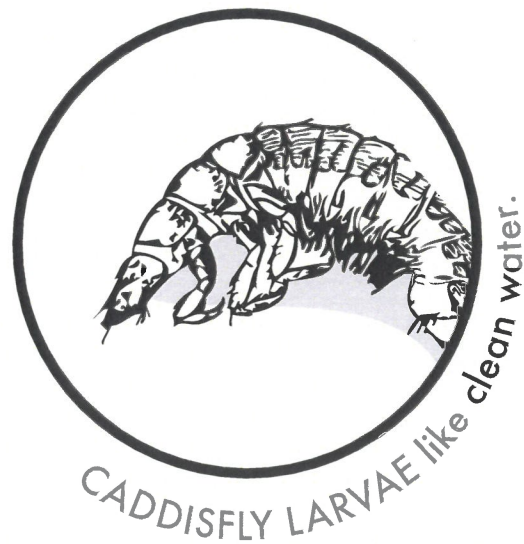
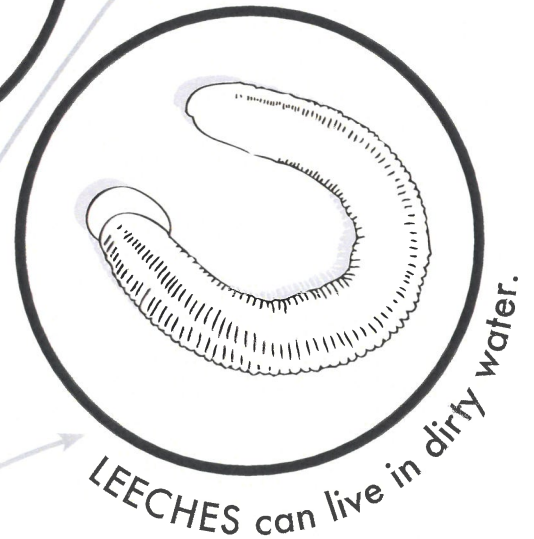
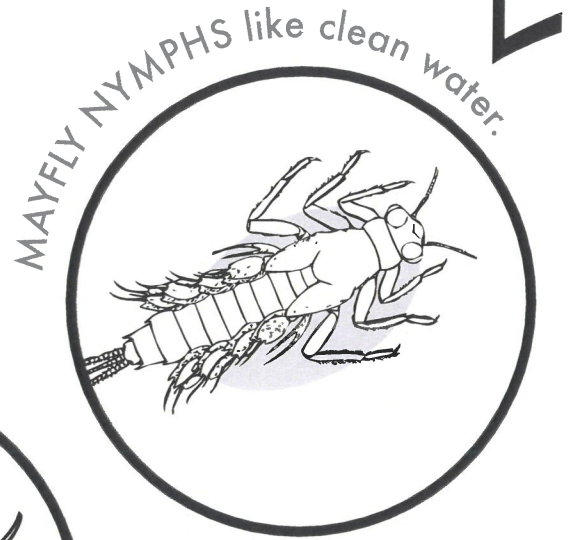
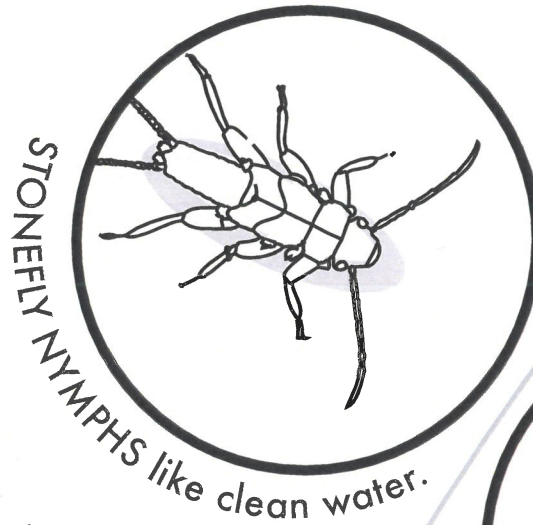
What doesn't belong?

There are many places to have fun and enjoy clean water. Wally enjoys the beach and the park, but some people don't take care of the environment like they should. Look at the pictures below and circle what doesn't belong.



Bugging out! Macroinvertebrates

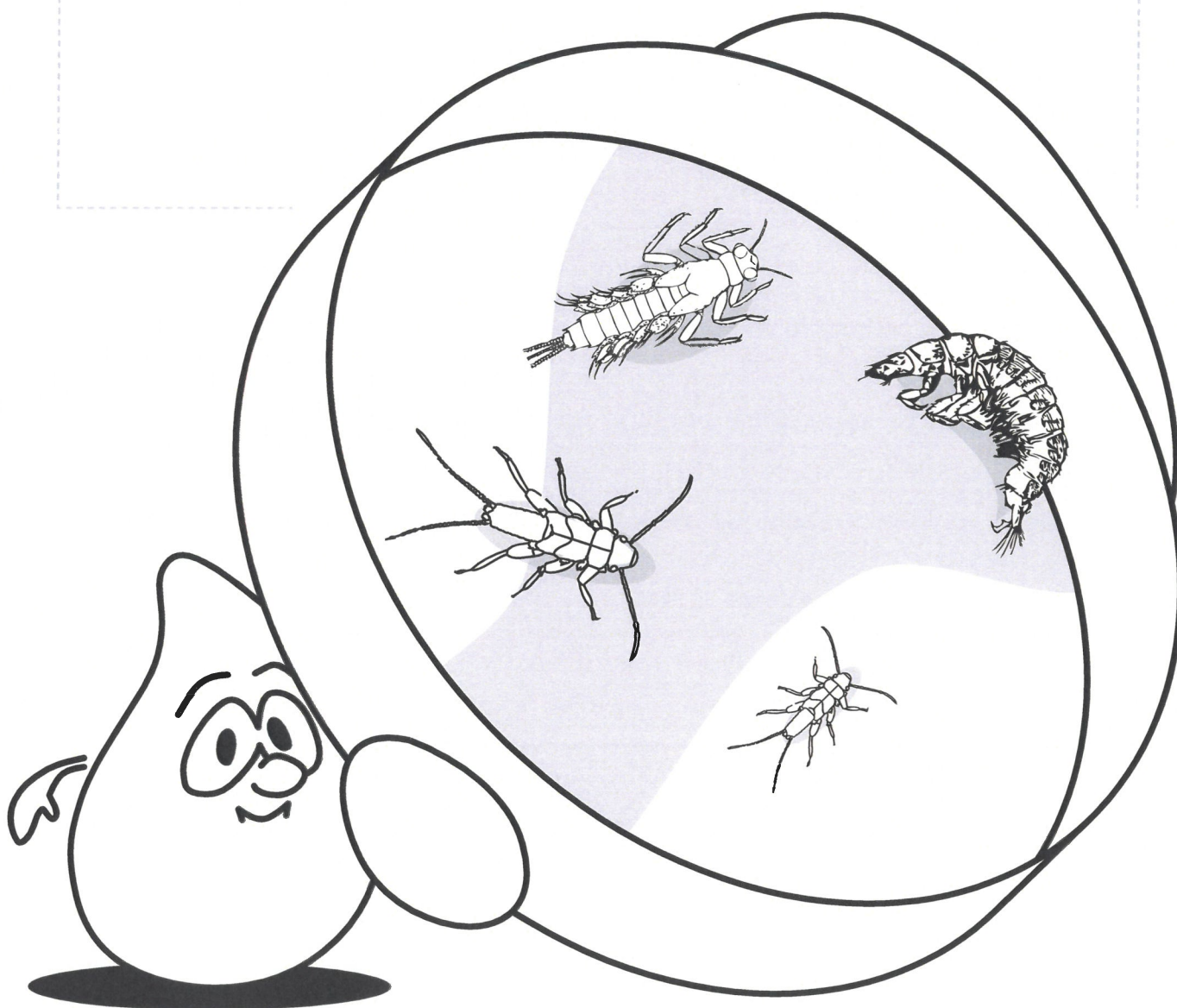
Macroinvertebrates (MAK-ro-in-VER-ta-brats) are tiny animals that don't have backbones. Some macroinvertebrates can live in dirty water, but others need to live in clean water. Color the macroinvertebrates that only like **CLEAN** water.





The Northeast Ohio Regional Sewer District collects macroinvertebrates at eight different locations along the Cuyahoga River!

Wally found these *macroinvertebrates* in a stream.
Do you think the stream is clean or dirty? Why?



ANSWER: The mayfly nymph, caddisfly larvae and stonefly nymphs like to live in CLEAN water, so Wally thinks the stream is CLEAN.

Be a part of Wally's Clean Water Team!

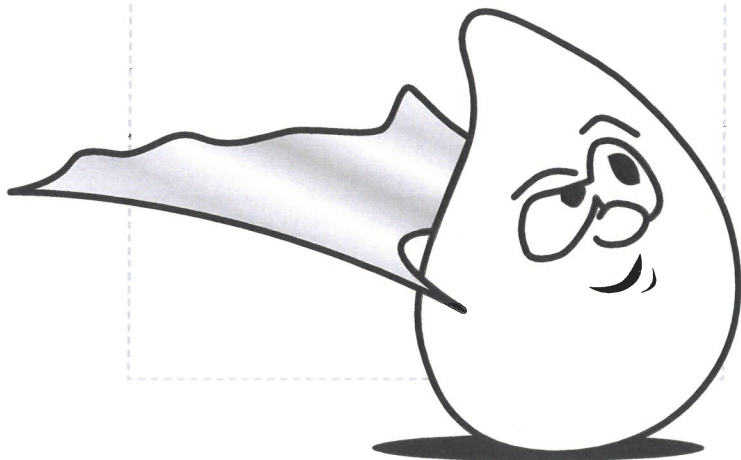
You don't have to be a superhero to protect clean water. There are things we all can do at home to stop pollution and keep our environment healthy. *Think of new ways to help our environment, then add your ideas to Wally's lists.*

Wally's DO list

1. Recycle.
2. Tell your friends that clean water is important!

Wally's DON'T list

1. Don't let your family pour paint or oil down the drain.
2. Don't throw trash on the street.



What else can I do to protect clean water? With your parent's permission, visit wheredoesitgo.org for more ideas!

Be clean-water smart!



With your parent's permission, visit **wheredoesitgo.org** and see if you can answer these questions.

What is "wastewater?" _____

What is "stormwater?" _____

What is a "watershed?" _____

What is a "combined sewer?" _____

What is an "interceptor?" _____

How many treatment plants are there in the Northeast Ohio Regional Sewer District's service area? _____

How many communities are there in the Northeast Ohio Regional Sewer District's service area? _____

Where can grown-ups recycle old paint or fertilizer?

Wally Waterdrop's
CLEAN WATER TEAM
Membership Pledge

I AM A PROUD MEMBER OF THE
WALLY WATERDROP CLEAN WATER
TEAM.

I WILL HELP PROTECT OUR LAKE
AND RIVER FROM POLLUTION.

I WILL HELP KEEP THE
ENVIRONMENT CLEAN BY KEEPING
DANGEROUS CHEMICALS LIKE OIL,
PAINT, AND CAR FLUIDS OUT OF OUR
DRAINS.

I WILL TALK TO OTHERS ABOUT
CLEAN WATER.

I WILL ENJOY CLEAN WATER BY
HAVING FUN IN PARKS, ON THE
BEACH, AND AT HOME.

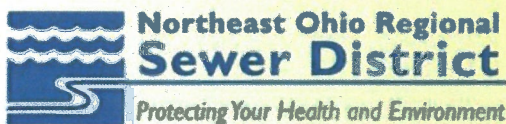
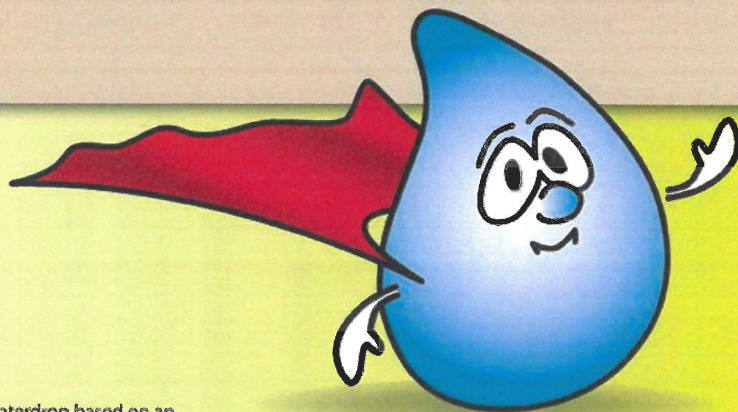
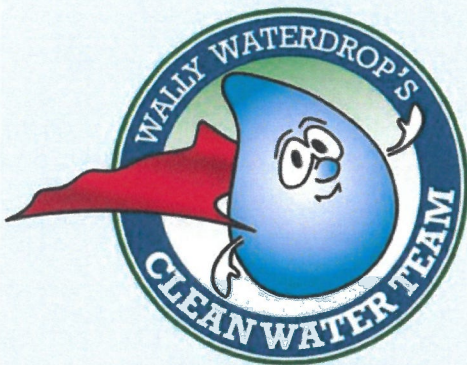
YOUR NAME HERE

Wally :)

WALLY WATERDROP
PRESIDENT

J. Ciaccia

JULIUS CIACCIA
EXECUTIVE DIRECTOR,
NORTHEAST OHIO REGIONAL
SEWER DISTRICT



VISIT WALLY'S WORLD! www.neorsd.org/wally

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