



A SUPERHERO'S GUIDE

to Protecting our Water

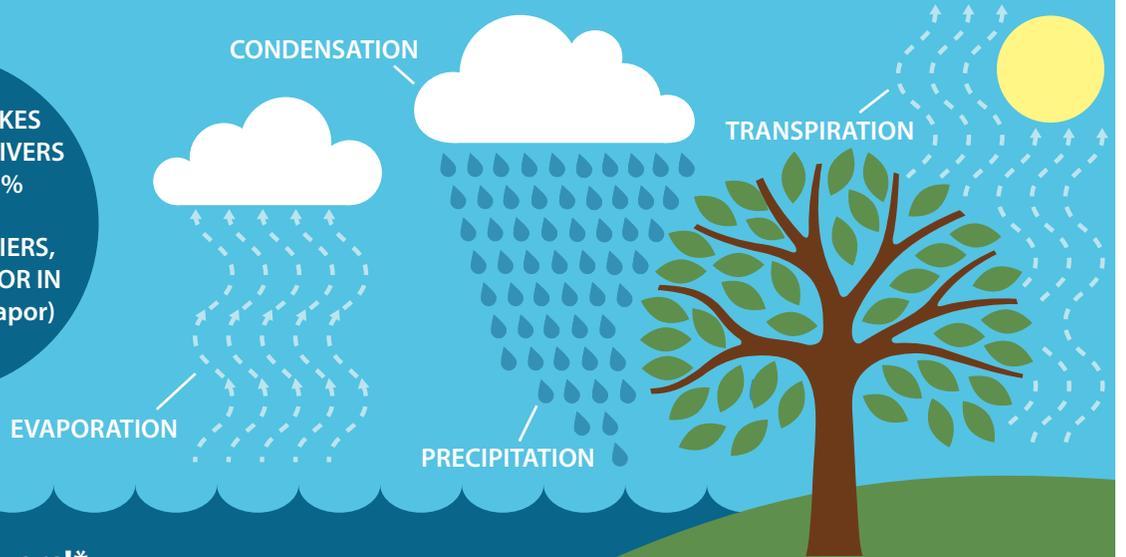
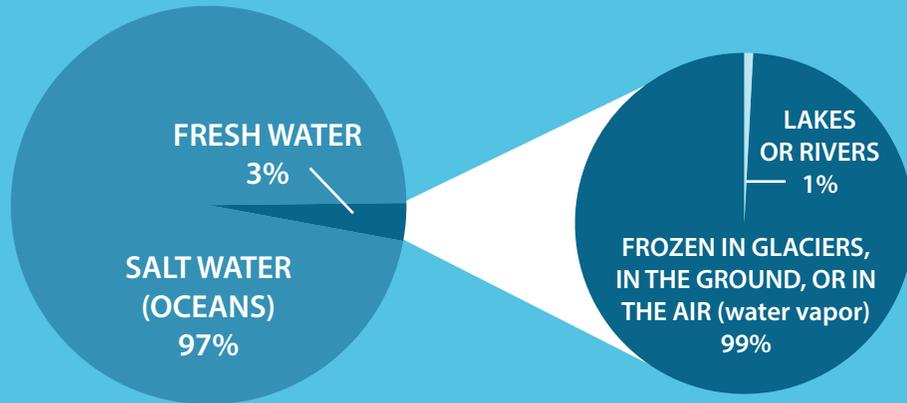
Superheroes know that water is precious and that we need to take care of it. Superheroes make good choices that help make our lakes and rivers cleaner and more beautiful!



CLEAR CHOICES
CLEAN WATER
make a difference

WHY IS WATER PRECIOUS?

Planet Earth does not have a lot of fresh water... And we can't make more than what is on the Earth.



ONLY 1% of the Earth's fresh water is in lakes and rivers!*

Why is this important? Our lakes and rivers supply drinking water for Central Indiana. We boat, fish, play, and swim in lakes and rivers. And wildlife needs lakes and rivers for food, water and shelter. In other words, lakes and rivers are precious resources that we need to take care of!

The amount of water on Earth is the same at all times and has been the same throughout the history of the Earth. The state of water can change (liquid, solid, gas) as it moves through the water cycle, but the total amount of water doesn't change.

* This represents .01% of the total water supply on Earth. All statistics sourced from Water Education Foundation.

HOW DOES POLLUTION GET INTO OUR LAKES AND RIVERS?



When it rains, water collects on our driveways, sidewalks and yards. Some of it is absorbed into the ground, but most of it flows into storm drains, then to pipes under the street and finally into a river or lake. (We call this water 'runoff' or 'stormwater'.) As it runs off, the water mixes with pollution that's on the ground - litter, chemicals, and animal poo, to name a few! *Ewww, right?*

Once in our lakes and streams, pollution can harm wildlife, create extra algae (that green stuff on the surface!), or make the water unsafe for swimming or boating. *That's no good!*

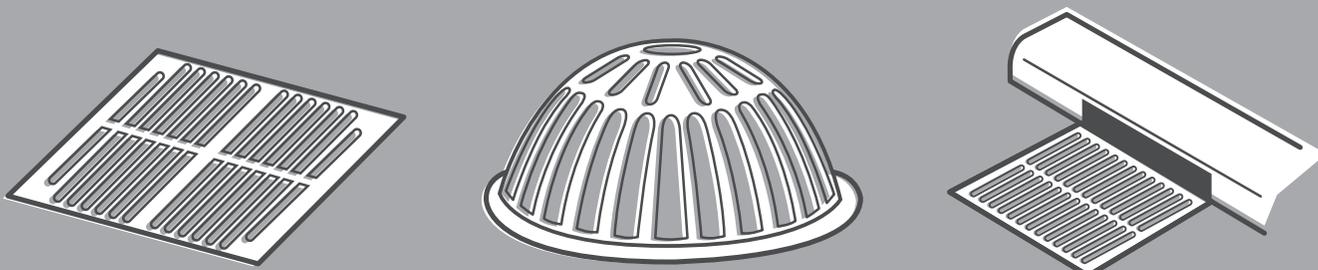
THEN & NOW

As the population has increased in the State of Indiana, so has development, which results in fewer plants and more hard surfaces. More runoff means more pollution in our lakes and rivers!



Adapted from (EPA) U.S. Environmental Protection Agency, 2003. Protecting Water Quality from Urban Runoff. EPA 841-F-03-003.

STORM DRAINS: What kind do you have in your neighborhood?



What kind of pollution does the water take with it as it runs off into lakes and rivers?

Leaves & Grass Clippings

Litter **Soil**

Pet and Goose Poo
Oil, Grease & Gasoline

Weed killer & Fertilizer
Pesticides

Manure
Cooking Grease

Road Salt
Soap Metals

Chemicals



So what CAN I put down a storm drain?

NOTHING!

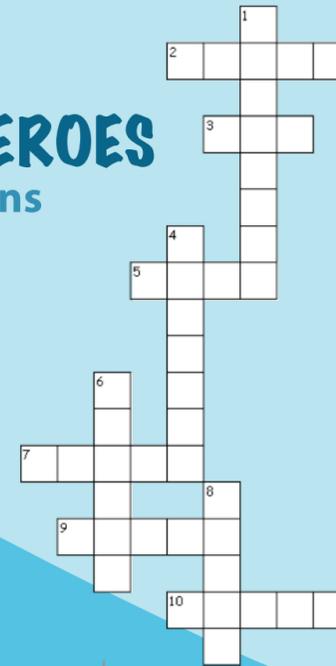
Remember, only rain goes in the drain!

How does a clean water

SUPERHERO

keep our lakes and rivers clean and beautiful?

SUPERHEROES find solutions



ACROSS

- _____ native plants like purple coneflower that help absorb extra rain water back into the ground.
- Pick up your pet's _____ with a baggie and put it in the trash.
- Put broken fishing _____ and Styrofoam containers in the trash after you're done fishing.
- Find the storm _____ near your home and check it once in a while to make sure there is nothing blocking it.
- Don't feed the _____ so they won't stick around.
- Pick up _____ that you see in the street, and of course don't litter.

DOWN

- Notice when oil or _____ from the car is leaking on your driveway and tell your parents.
- Be a good _____ by following the law not putting anything in a storm drain.
- Help your family pick up grass clippings and _____ in the fall so that they don't get into the storm drain.
- Use the map below to _____ which lakes and rivers are near you.

Answers to the puzzle may be found at the FAQ section at clearchoicescleanwater.org

SUPERHEROES

are good citizens who follow the law

Most cities require citizens to keep the storm drains in their neighborhoods clean. That means picking up any grass clippings, leaves, and litter around the drain. And of course, it is illegal to put anything down a storm drain on purpose. This is called 'illegal dumping'. If you see someone doing this, tell an adult to report it to your city's stormwater office.

SUPERHEROES

know their lakes and rivers

When it rains in the area outlined on the map, all of the water ends up in the same place – White River. The water may take many different routes, but it will eventually find its way from our yards and streets into one of the creeks, rivers, or lakes on the map. From there it will flow into the White River. So... all of our actions, good or bad, affect the White River (and the Wabash River, Ohio River, Mississippi River, and Gulf of Mexico).

Can you find the creek, river or lake nearest your house?



SUPERHEROES

understand the problem

When pollution flows into a storm drain, it ends up in a lake or river. See if you can figure out what can happen when certain kinds of pollution enter the water. Draw a line connecting the pollution to the problem. Some answers are used more than once.

Families don't pick up leaves and grass clippings, they blow into the street and when it rains, they are carried into the storm drain and then into a lake or river.

People don't pick up their pet poo, and when it rains, bacteria are carried into the storm drain then into a lake or river.

Loose soil at construction sites is not protected, and when it rains, the loose soil is carried into the street, into a storm drain and then into the river.

People feed the geese, which attracts more geese. When it rains, the goose poo is carried into a nearby lake.

Families wash their cars in the driveway and soapy water runs off into the street, down the storm drain, and into the river.

Someone pours leftover paint directly into the storm drain, and it flows into the river.

Families feed their grass too much fertilizer, and when it rains, the water carries the extra fertilizer into the storm drain and then into nearby lakes and rivers.

Answers to the matching activity may be found at the FAQ section at clearchoicescleanwater.org.

The water appears brown, and the bottom of rivers is too muddy for fish to lay their eggs.

Chemicals build up in the water, harming or often killing fish.

Too much algae grows, making an ugly mess on the water's surface that people can't swim or boat in.

The cost to clean the water for drinking increases.

Too much dangerous bacteria can grow, and the water may be unsafe for swimming.



SUPERHEROES know their role and make good choices to keep our lakes and rivers clean and beautiful!



CLEAR CHOICES
CLEAN WATER


WHITE RIVER
ALLIANCE

www.Indiana.ClearChoicesCleanWater.org
For more information, contact info@clearchoicescleanwater.org

