PROTECTING OUR WATERWAYS

WITH MANDY THE SALAMANDER



MEET MANDY THE SALAMANDER!

Mandy the Salamander helps Louisville MSD explain why safe, clean waterways are important for salamanders like her and other fish and animals living in and near our streams.

Mandy is a **Tiger Salamander** (Ambystoma tigrinum), a mole salamander species, and one of North America's largest terrestrial salamanders. Tiger salamanders are very picky about where they live. Female salamanders like Mandy can lay hundreds of eggs in the water. When they hatch, the baby salamanders or larvae stay in the water for up to five months until they are adults. You can see why safe, clean waterways are very important to salamanders!





CAN YOU SOLVE THE MESSAGES?

Have you ever seen rainwater flowing down a road and wondered where it goes? Mandy knows the rainwater eventually makes it to her home near the stream. That water can carry trash and other waste as it travels, polluting Mandy's home.

Unscramble the sentences below to find out what you can do to help keep our waterways safe and clean for Mandy and her friends.



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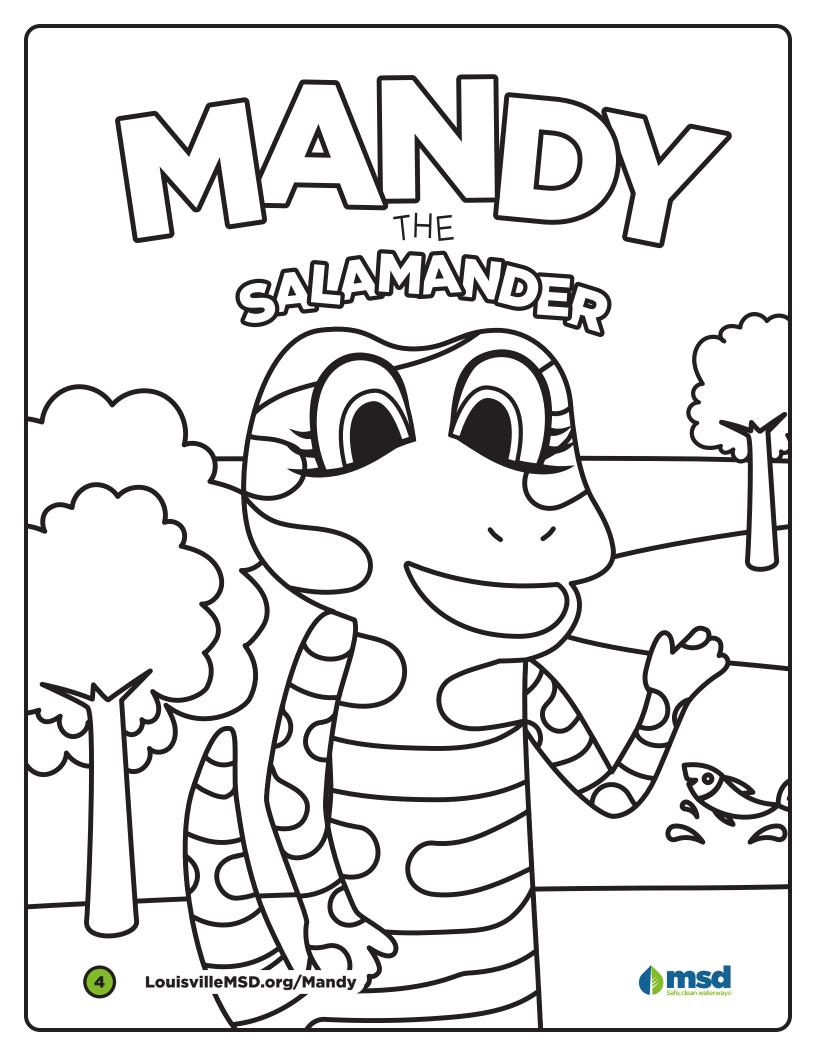
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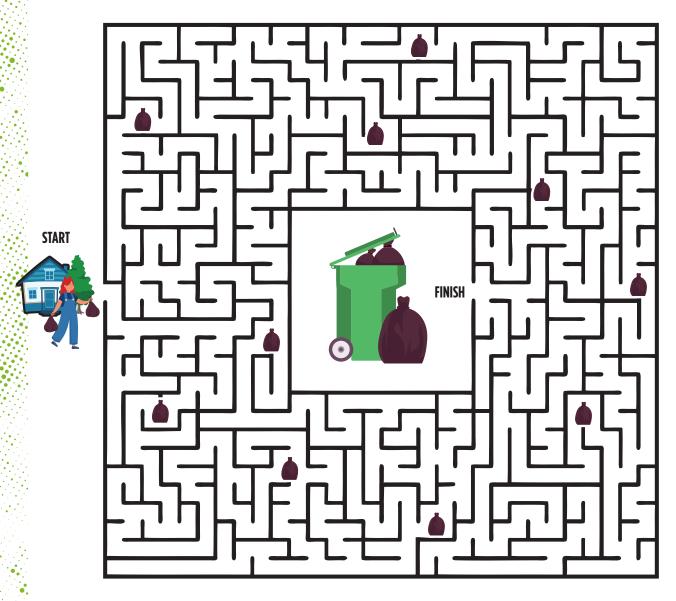
Solve the hidden message to help Mandy and her friends by using the code key below.





SOLVE THE MAZE!

Can you help our volunteer pick up all the trash bags and find their way to the trash can?



Drains are only for water.

Never dump anything into a catch basin or storm drain. They drain into the stream!

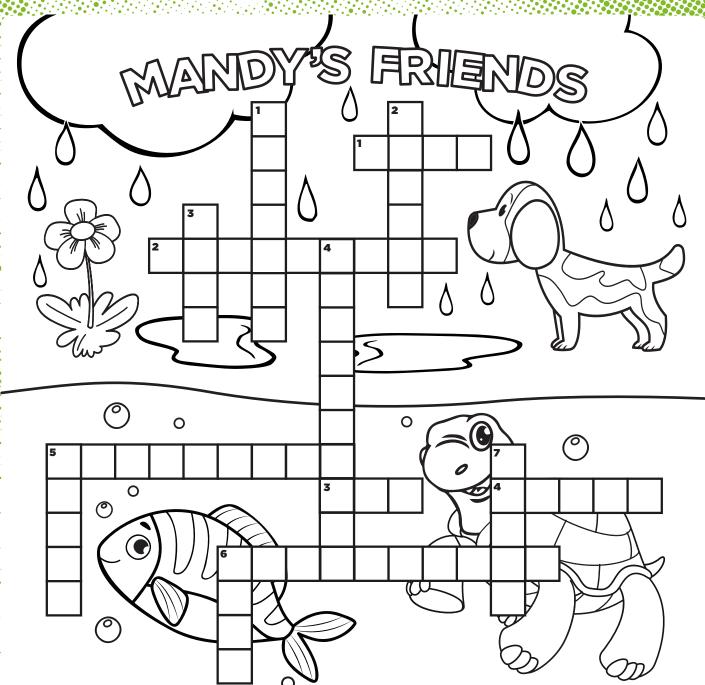


Put pet waste in the trash.

Dogs in Jefferson County produce 4 dump trucks of waste everyday.







Across

- 1. Animal that only lives in the water with gills and fins.
- 2. Area of land where all of the water that falls in it (rain and snow) drains off and goes to a common outlet.
- 3. This common pet's waste should be picked up and placed in the trash so it doesn't get carried to the creeks and streams.
- 4. Flowing water, sometimes used for kayaking, canoeing, swimming or fishing.
- 5. Harmful materials in the environment.
- 6. Runoff from rain or snowmelt that drains to ditches, creeks, streams, catch basins and pipes.

Down

- Purple coneflowers, goldenrod, and blue flag irises are examples of this type of plant and native to Kentucky.
- 2. Another word for trash.
- 3. Water falling from the sky.
- 4. Amphibian in our local waterways with a tail.
- 5. Public green areas where you can play.
- 6. A small object produced by a plant from which a new plant can grow.
- 7. Tall plants that provide shade, make oxygen, clean the air and provide a place for animals to live.



LouisvilleMSD.org/Mandy



WORD SEARCH

Can you find the words we use when speaking about keeping our streams safe and clean? Some words may be forward, backward, horizontal, vertical or even diagonal.

STORMWATER	WATERSHED	RAINGARDEN	CLEAN WATER
SALAMANDER	RUNOFF	SEDIMENT	OIL
POLLUTION	CONSERVATION	FLOWERS	TRASH
TREES	ENVIRONMENT	STREAM	RAIN

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J	S	С	Ν	G	G	С	J	Μ	Н	Т	Ν	В	F	Α	С	Н	В	F	Ε	С	W	0
W	0	С	Κ	С	R	Α	I	Ν	Q	Т	Μ	V	Ν	Т	S	L	S	Т	Р	F	Ν	1
Q	Υ	Р	I	S	L	K	Р	Ν	С	Т	J	K	I	Ε	Т	Μ	D	I	Q	Μ	I	L
Υ	Ν	I	R	Ε	D	Ν	Α	Μ	Α	L	Α	S	G	R	Р	R	S	С	L	D	Т	D
В	1	С	I	Р	Α	Q	L	V	Q	V	V	I	Ε	S	0	R	Ε	L	Z	1	Ν	F
D	Α	С	G	Ε	V	0	Р	Χ	Ε	U	I	С	Z	Н	Υ	Ν	D	Ε	Ν	Р	Ε	L
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L J E	P L O	Z D C	N C O	H M N	J H S	H R E	S W R	A V V U	R C A	T L T	P E I O	O A O	K N N	K W A	H A T	T T J	H E F	O R D	N W W	J T O	D E S	E R S
L J E O	P L O Z	Z D C	N C O M	H M N P	J H S O	H R E L	S W R L	A V V U	R C A T	T L T I	P E I O	O A O N	K N N A	K W A J	H A T S	T T J E	H E F Q	O R D	N W W B	J T O X	D E S	E R S K

Know the 3 Ps of Potty Safety

The Bowl Patrol characters—Pee, Poo and Toilet Paper—know the importance of proper flushing. Never flush "flushable" wipes, which do not break down and can clog home plumbing or cause issues in the sewer system. Flushing only the three Ps will help keep your toilet and pipes working and also help keep MSD's water quality treatment centers treating more than 155 million gallons of wastewater daily! Visit LouisvilleMSD.org/BowlPatrol to learn more.

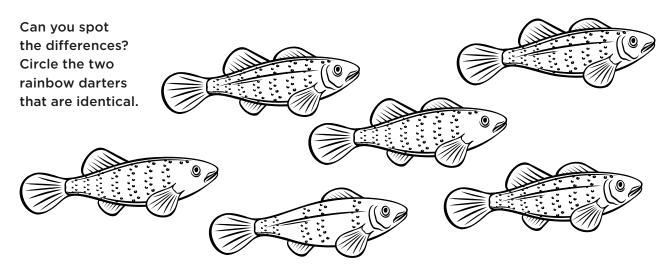


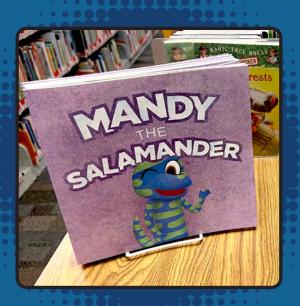


FIND THE IDENTICAL RAINBOW DARTERS

Did you know MSD collects fish and insects to determine how healthy creeks and streams are in our community? Because fish and insects are affected by how clean the water is in our streams, they are water quality indicators. In addition, they need rocks and plants for shade, food and places to live. The fish and insects may die if the water lacks enough oxygen or is too hot.

Fertilizers, pesticides and even dog poo can get into the stream when it rains, making the water less healthy for the wildlife in and around the waterway. Some animals, like leeches and aquatic worms, can handle more pollution, but others like rainbow darters and stoneflies need clean water to survive.





GET YOUR OWN FREE MANDY BOOK!

Check your local branch of the Louisville Free Public Library to find your free copy of Mandy the Salamander and learn more about how you can help keep our streams safe and clean!



LouisvilleMSD.org/Mandy