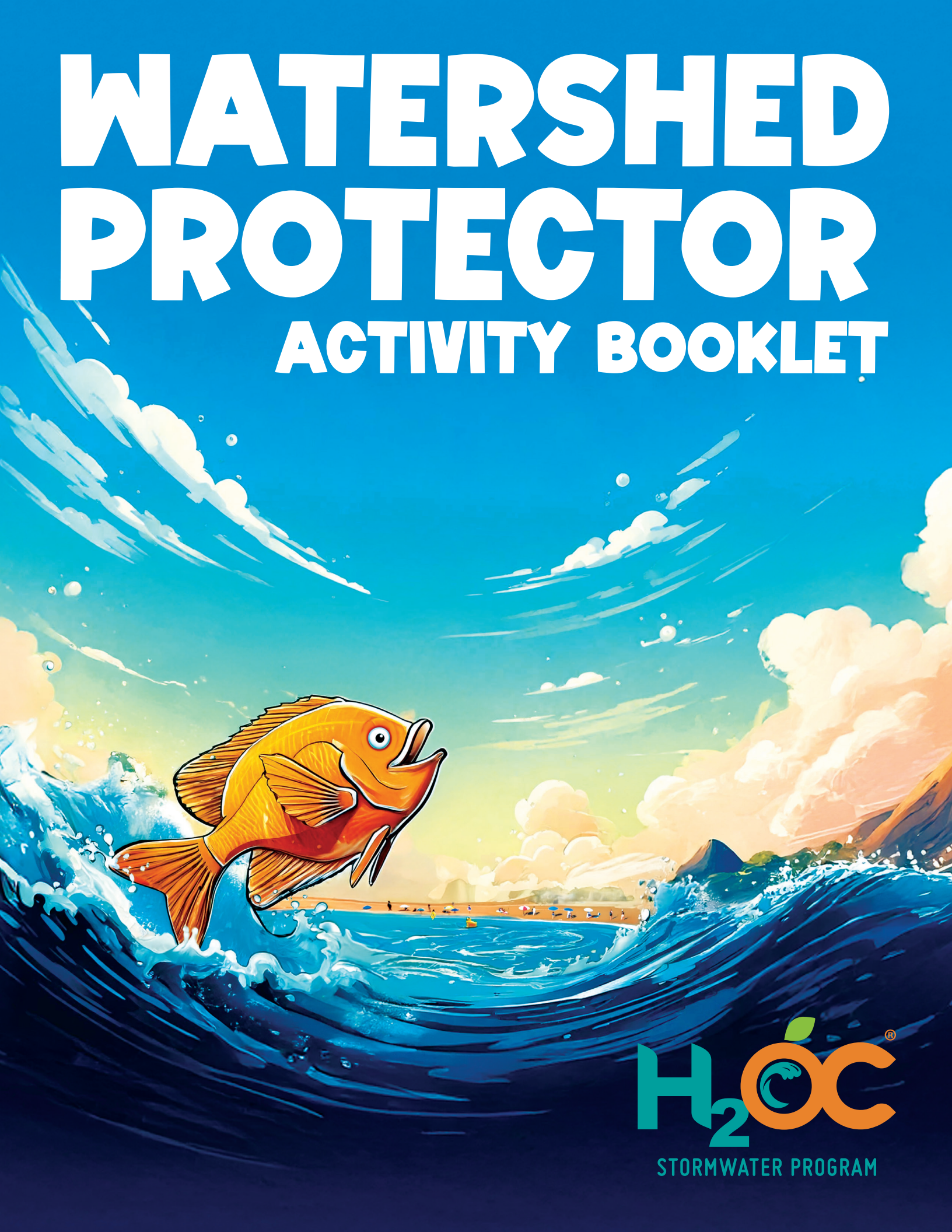


WATERSHED PROTECTOR

ACTIVITY BOOKLET



STORMWATER PROGRAM

WATERSHED PROTECTORS, UNITE!

Welcome, Watershed Protector!

Did you know that YOU live in a watershed? A watershed is an area of land where all rainwater flows downhill into creeks, rivers, and eventually the ocean through the storm drain system. Orange County has 11 watersheds and no matter where you are, you are in one of them!

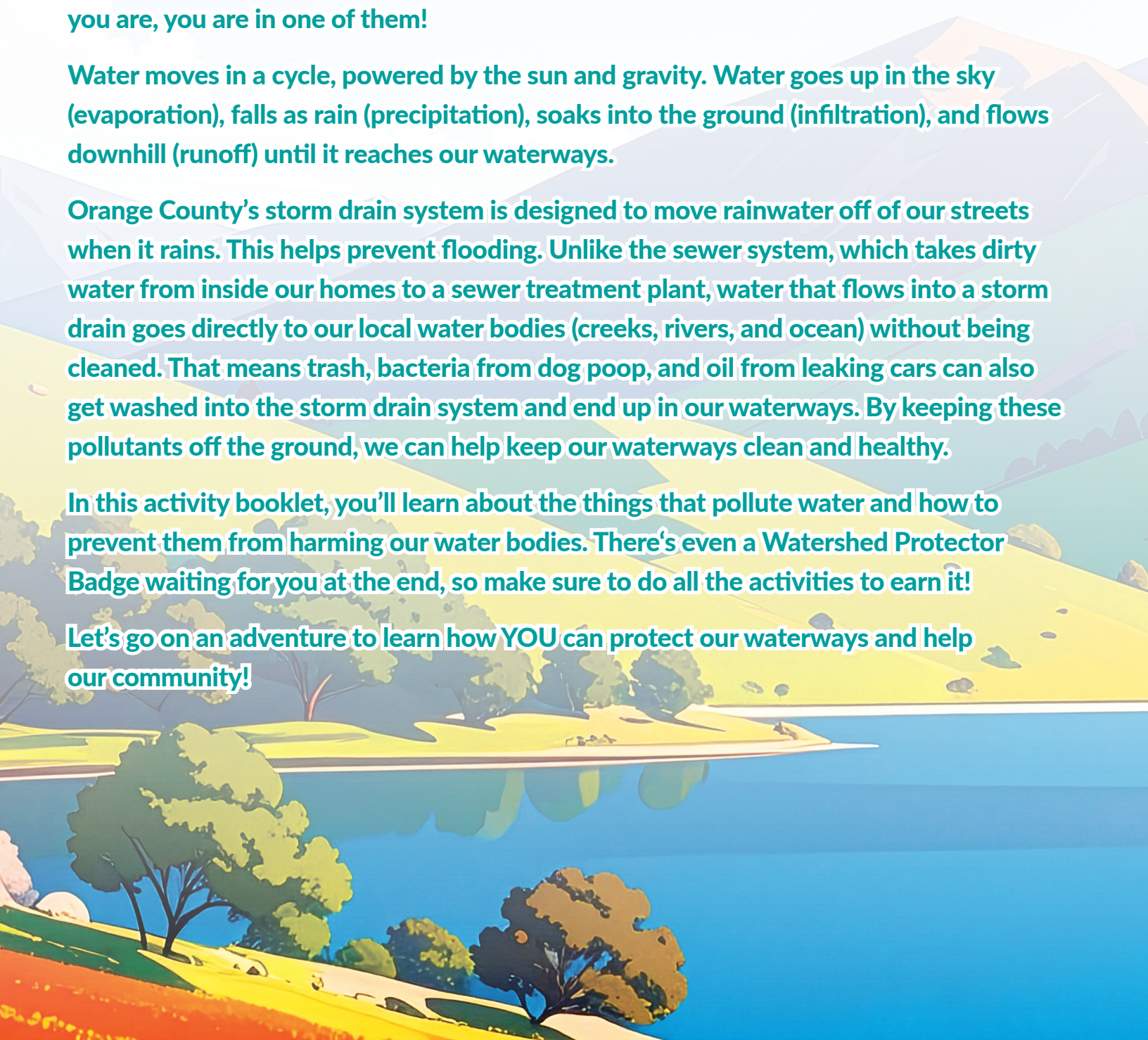


Water moves in a cycle, powered by the sun and gravity. Water goes up in the sky (evaporation), falls as rain (precipitation), soaks into the ground (infiltration), and flows downhill (runoff) until it reaches our waterways.

Orange County's storm drain system is designed to move rainwater off of our streets when it rains. This helps prevent flooding. Unlike the sewer system, which takes dirty water from inside our homes to a sewer treatment plant, water that flows into a storm drain goes directly to our local water bodies (creeks, rivers, and ocean) without being cleaned. That means trash, bacteria from dog poop, and oil from leaking cars can also get washed into the storm drain system and end up in our waterways. By keeping these pollutants off the ground, we can help keep our waterways clean and healthy.

In this activity booklet, you'll learn about the things that pollute water and how to prevent them from harming our water bodies. There's even a Watershed Protector Badge waiting for you at the end, so make sure to do all the activities to earn it!

Let's go on an adventure to learn how YOU can protect our waterways and help our community!



ACTIVITY 1

MATCH THE MEANING

To protect our creeks, rivers, and ocean, it's important to understand some key words. The more you learn, the better you can be at protecting our waterways. A smart Watershed Protector is a *superhero* for our creeks, rivers, and ocean!

Draw a line from the word to the correct definition!

RUNOFF

STORM DRAIN

WATERSHED

LITTER

POLLUTION

STORMWATER

PRECIPITATION

INFILTRATION

A

Water from rain or sprinklers that flows over roofs, driveways, parking lots, yards, and other places instead of soaking into the ground.

G

Rain, hail, freezing rain, sleet or snow falling from the sky.

E

Trash left on the ground.

F

The flow of rainwater over land that does not go into the ground.

C

An opening in the street or curb that drains rainwater into an underground system of pipes to prevent flooding.

B

Harmful stuff that can affect the health of plants, animals and people.

H

The process of water soaking into the ground.

D

An area of land where water flows to creeks and rivers, and eventually to reservoirs, bays, and the ocean.

Answer Key: A, Pollution; B, Storm Drain; C, Watershed; D, Litter; E, Stormwater; F, Precipitation; G, Infiltration; H, Runoff

ACTIVITY 2

WORD SEARCH

Time to become a detective and train your eyes to spot pollution! Can you find these common pollutants and help keep them away from our waterways?

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



LITTER



OIL



PESTICIDE



FERTILIZER



DETERGENTS



BACTERIA



METALS



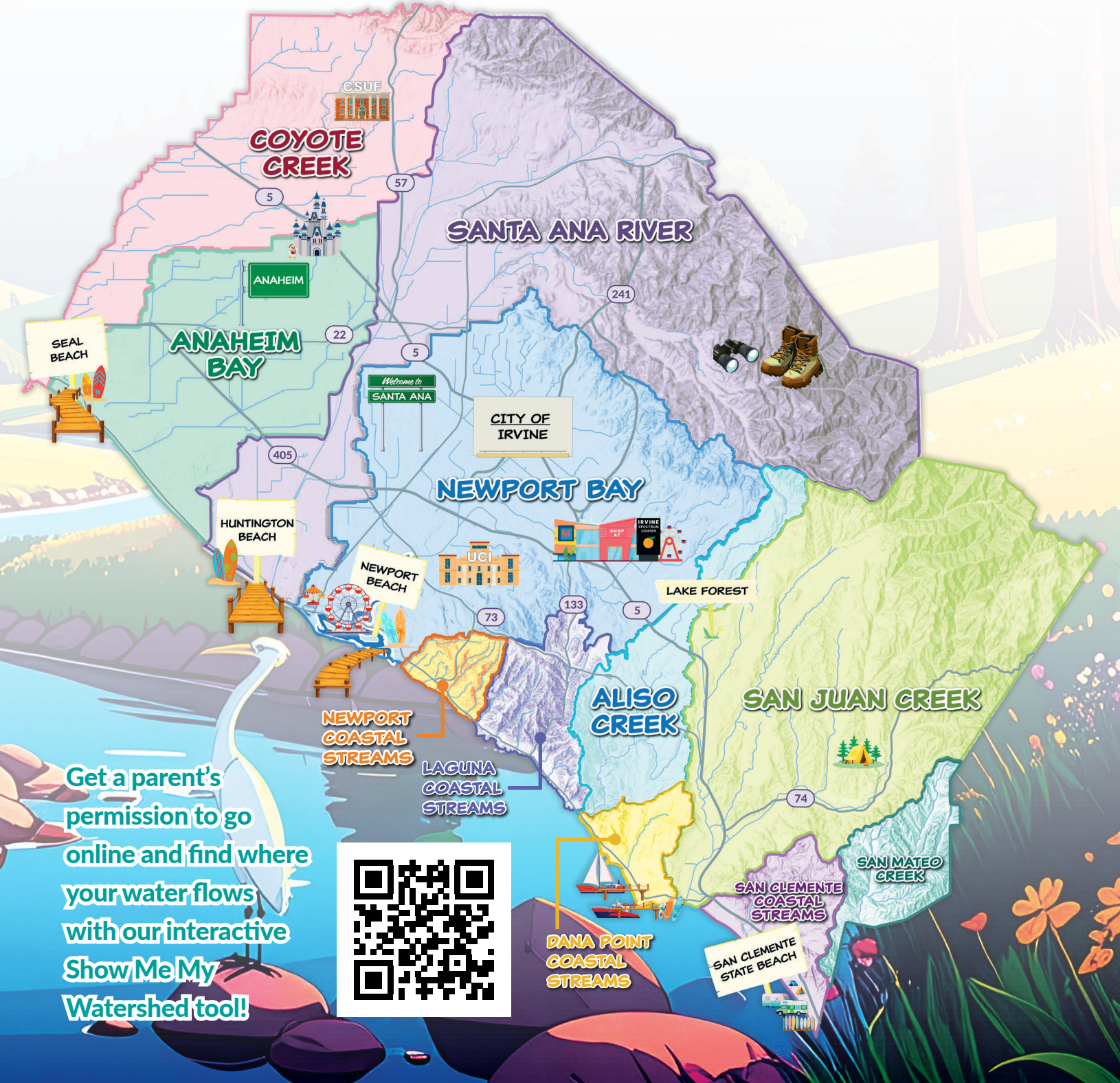
PETWASTE



ACTIVITY 3 WATERSHED MAP

Here's a map of all 11 watersheds in Orange County. No matter where you are in Orange County, you're in one of these 11 watersheds! Which watershed do you live in?

Write it here: _____ Also, circle where your watershed drains to.



ACTIVITY 4

COLORING PAGE

Our watersheds are full of incredible plants and animals. Grab your crayons, markers, or colored pencils and bring even more life to this watershed.



Look for (check boxes):

- Storm drains
- River or creek
- Trees and wildlife
- People properly disposing waste
- A dog walker using a pet waste bag
- Someone riding a bike on a path along the creek
- Person fixing a sprinkler
- Rain Barrel





ACTIVITY 5

QUIZ YOUR PARENTS!

Alright Watershed Protector, it's time to test your parents. Can you beat their score? By teaching your parents how to be knowledgeable Watershed Protectors too, you can double your impact! Answer the questions below!

1. Where does rainwater go?
 - A. The sewer system where it is treated before being released to the ocean
 - B. The storm drain system where it flows to the ocean untreated
 - C. It stays in the streets
2. Keeping pollutants like trash and dog waste out of the storm drain system keeps fish healthy, protects your neighbors, and helps our ocean thrive.
 - A. True
 - B. False
3. Which of these helps protect the watershed?
 - A. Picking up dog waste by disposing of it in a covered bin
 - B. Feeding ducks at your local park
 - C. Allowing soapy water from washing your car flow to the storm drain
4. Putting used motor oil in the trash or pouring it down the storm drain:
 - A. Is usually safe
 - B. Won't cause a problem
 - C. Can pollute creeks, rivers and ultimately the ocean
5. Stormwater pollution can be caused by:
 - A. Local businesses
 - B. People like you and me
 - C. Pets
 - D. All of the above
6. When you see a water pollution problem you should have a grownup:
 - A. Call the County's Water Pollution Reporting Hotline at 1-877-89-SPILL
 - B. Visit <https://myOCeServices.ocgov.com> to submit a Service Request under Water Pollution
 - C. Report it to the city
 - D. All of the above

Score Categories:

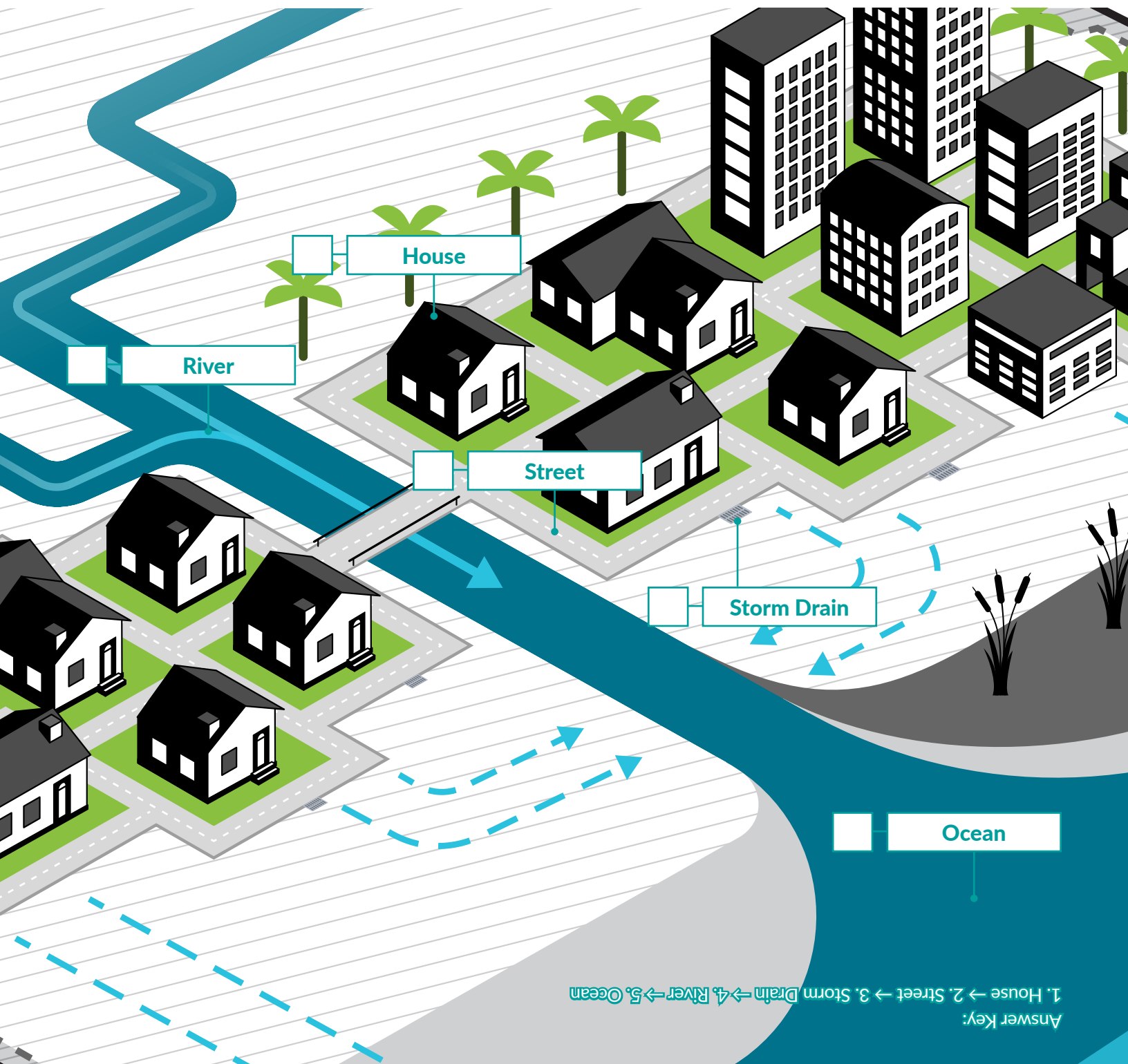
5-6 correct: Watershed Protector - Your parents are Watershed Protectors just like you!

3-4 correct: Watershed Trainee - You could teach your parents a few things!

0-2 correct: Watershed Rookie - Go through this workbook with your parents to help educate them!

ACTIVITY 6 CONNECT THE DROPS

Did you know that what you do outside your front door can impact our ocean? This is because anything that flows into the storm drain system can go untreated into our creeks, rivers, and eventually the ocean. Fill in the boxes with numbers to show the order stormwater travels:



Answer Key:
1. House → 2. Street → 3. Storm Drain → 4. River → 5. Ocean

ACTIVITY 7

SPOT THE DIFFERENCE

Look at the two pictures of a neighborhood park. One is clean and the other has some problems!

- Write the problems and how to fix them.
- Circle at least 5 things that are wrong in the second picture.



Problem 1: _____

Solution 1: _____

Problem 2: _____

Solution 2: _____

Problem 3: _____

Solution 3: _____

Problem 4: _____

Solution 4: _____

Problem 5: _____

Solution 5: _____

Problem 6: _____

Solution 6: _____

Answer Key:
 Problem 1: Litter, Solution 1: Place trash in closed bin | Problem 2: Dog waste on ground, Solution 2: Pick up dog waste with a plastic bag, tie it shut and place it in a closed bin | Problem 3: Uncovered trash bin, Solution 3: Place cover on trash bin | Problem 4: Leaking car, Solution 4: Go to an auto repair shop | Problem 5: Dumping soapy water into the storm drain, Solution 5: Dump down sewer system drain | Problem 6: Sprinklers causing runoff, Solution 6: Reduce watering



WATERSHED PROTECTOR BADGE!

Congratulations! You've completed all of the activities, demonstrating that you are a champion of our local water bodies. The last step before you earn your Watershed Protector Badge is to sign the Watershed Protector Pledge!

I, _____, promise to help protect my watershed to keep aquatic life, my family, and my community safe.

You are someone who can make a difference in keeping our waterways safe and healthy.

- Peel off this sticker and place it on your shirt.
- Share your work with your teacher or parent.
- Decode the message to learn what to do next!

16 - 18 - 15 - 20 - 5 - 3 - 20

25 - 15 - 21 - 18

23 - 1 - 20 - 5 - 18 - 19 - 8 - 5 - 4

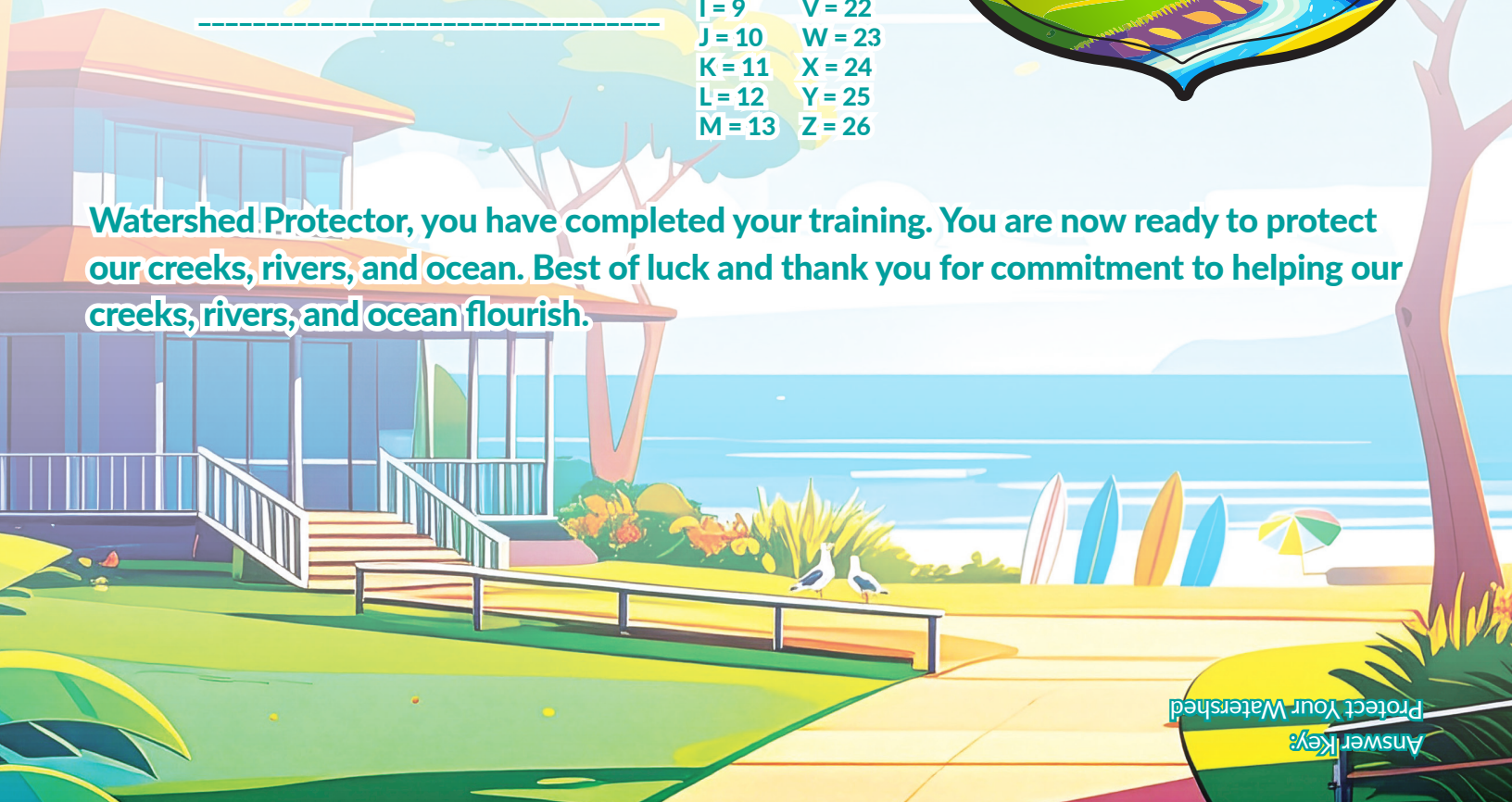
Answer: _____

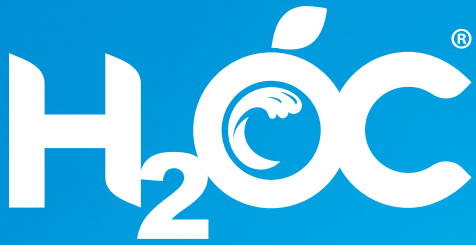
Key:

A = 1	N = 14
B = 2	O = 15
C = 3	P = 16
D = 4	Q = 17
E = 5	R = 18
F = 6	S = 19
G = 7	T = 20
H = 8	U = 21
I = 9	V = 22
J = 10	W = 23
K = 11	X = 24
L = 12	Y = 25
M = 13	Z = 26



Watershed Protector, you have completed your training. You are now ready to protect our creeks, rivers, and ocean. Best of luck and thank you for commitment to helping our creeks, rivers, and ocean flourish.





STORMWATER PROGRAM

www.h2oc.org

