

Chesapeake Bay

National Park Service
U.S. Department of the Interior

Chesapeake Bay Program Office



Illustration by Jason Vaughan

This book belongs to: _____



Introduction

Welcome to the Chesapeake Bay, a National treasure known for its historical and environmental importance! The Chesapeake Bay is the largest **estuary** in the United States. An **estuary** is a body of water where freshwater rivers mix with salty ocean water, forming brackish water.

Junior Rangers who complete this booklet will learn about what makes the Chesapeake Bay region so special and valuable.



Image Credit: Dave Harp



Image Credit: Matt Rath / Chesapeake Bay Program

To earn a Chesapeake Bay Junior Ranger Badge, you must:

- ◇ complete as many activities as you can;
- ◇ have a parent, guardian, or park ranger sign your certificate to show you completed the activities; and
- ◇ turn in your booklet to receive your badge (see the last page for instructions).

For more information on the Chesapeake Bay info presented in this booklet, visit:

nps.gov/chba

findyourchesapeake.com

chesapeakebay.net

The Junior Ranger Program is a program in many National Parks that is a way to have children learn about parks, and protect their legacy and stories. For more information visit nps.gov/kids/jrRangers.



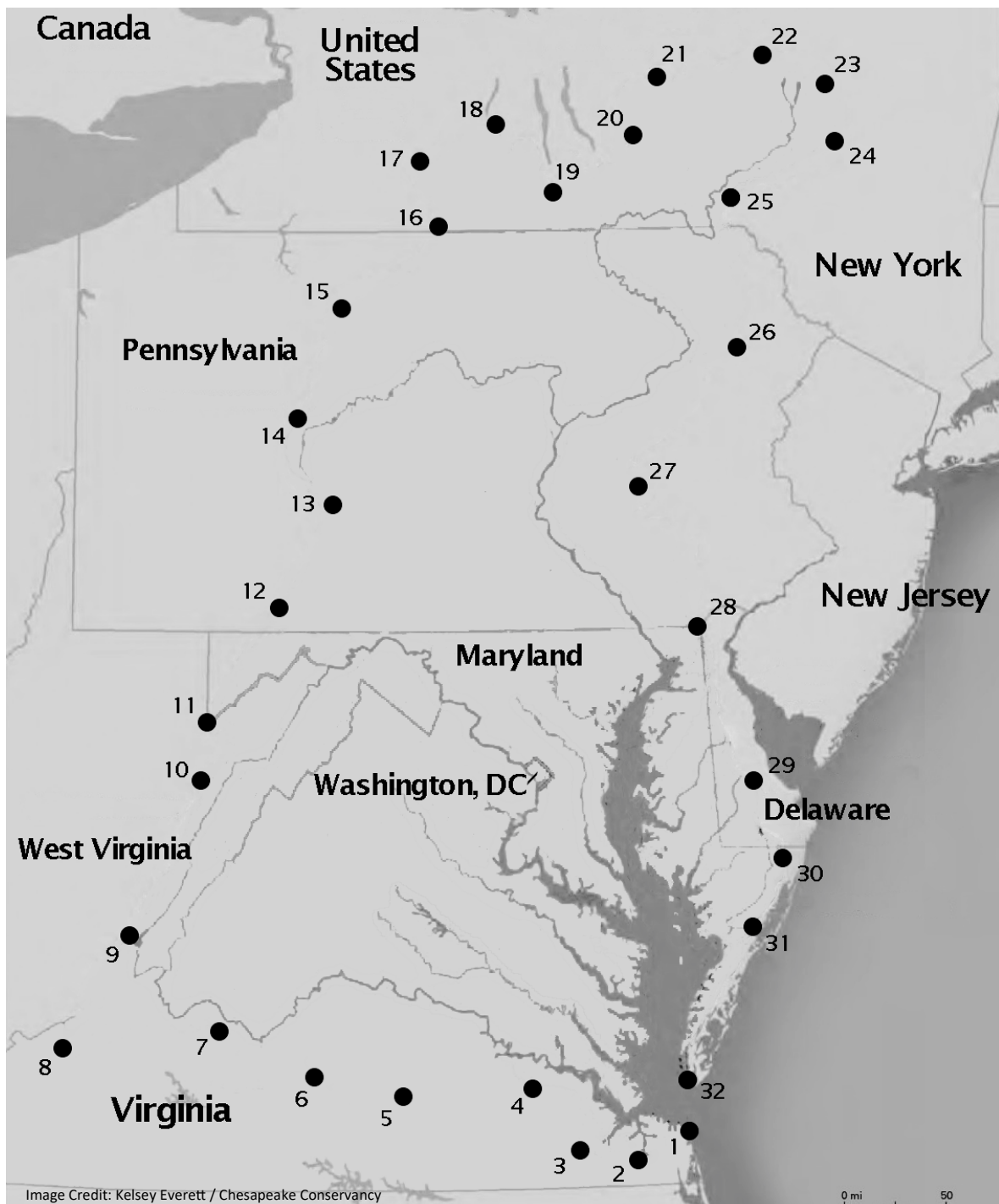
Image Credit: Meghan Carfoll Powell / USFWS



What is a Watershed?

The Chesapeake Bay is located in Maryland and Virginia, but its **watershed** extends into Pennsylvania, New York, Delaware, West Virginia, and Washington D.C. A **watershed** is an area of land that drains all of the water that falls in the area into a large body of water.

Connect all of the dots in the map below to see how far the Chesapeake Bay Watershed reaches. Once finished, mark down where you live, where you are visiting, where you have visited, or where you would like to visit with a circle!



Chesapeake Bay



Rivers of the Watershed

The Chesapeake Bay watershed is made up of thousands of streams, creeks, and rivers that all flow towards the Bay. These waterways provide fresh water to the Bay and offer shelter to many plants, fish, and other creatures!

Unscramble the words to discover some of the important rivers that drain into the Bay! Use the clues and map for help in locating the rivers below.

What river is 115 miles and entirely in Maryland?

U	N	P	E	T	A	T	X

Maryland and Virginia are split by the:

M	P	T	C	A	O	O

This river starts in New York and sends about 20 billion gallons of fresh water a day into the Bay:

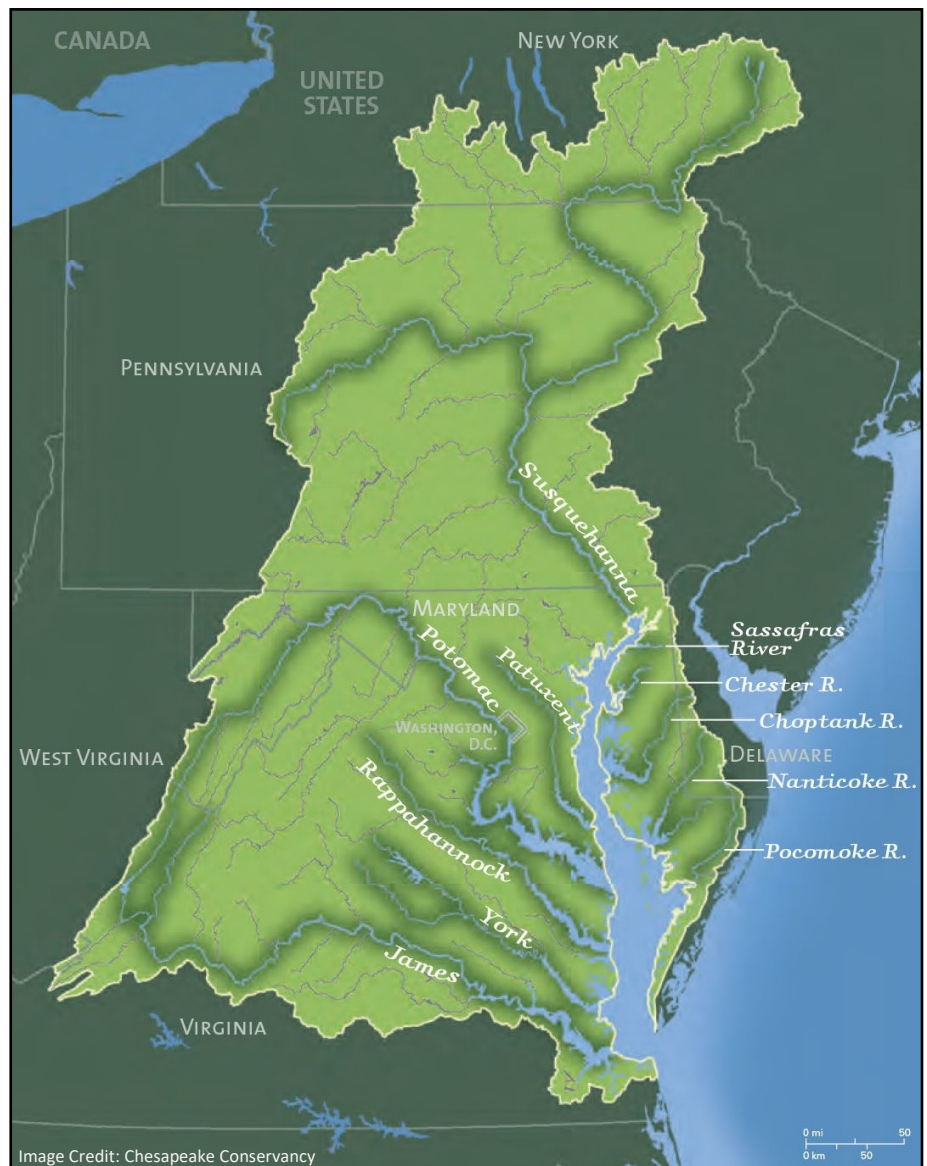
S	N	H	U	S	S	U	Q	E	A	N

Virginia's largest river is the:

M	A	J	E	S

The longest river on the Eastern Shore of the Bay is the:

N	C	O	H	A	P	K	T





Habitats of the Bay

The Chesapeake Bay is a complex **ecosystem** made up of a large community of living organisms, such as plants and animals interacting with their habitats. A **habitat** is the natural home for different organisms and there are six different types of habitats in the Chesapeake Bay Watershed.

Match the numbers with the letters to discover and learn what habitats help make the Bay beautiful! Then, find the habitat in the picture and write what number it

Activity Key

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



R	E	E	F	S
18	5	5	6	19

Found on the bottom of the Chesapeake Bay.
Home to oysters, and shellfish.

15	16	5	14		23	1	20	5	18

A shelter for fish from predators.
Aquatic grass beds create a home and shelter for blue crabs and small fish.

6	15	18	5	19	20	19			

Provide clean water and air by trapping pollutants.
Home for creatures such as deer, foxes, and birds.

18	9	22	5	18	19				

Provide the Chesapeake Bay with its fresh water.
Fish use this habitat for breeding and spawning.

2	5	1	3	8	5	19			

Thousands of miles throughout the Chesapeake Bay shoreline.
Home to many animals despite the wind and heat.

23	5	20	12	1	14	4	19		

Improves water health, protects shorelines, and prevents erosion.
Home to creatures like beavers and herons.

Ex: 1.



Chesapeake Critters

The Chesapeake Bay is home to many unique creatures and organisms. They all serve a purpose in keeping the ecosystem in balance.

Solve the crossword using the word bank and the hints below! To learn more about the animals in the Watershed, visit chesapeakebay.net/fieldguide



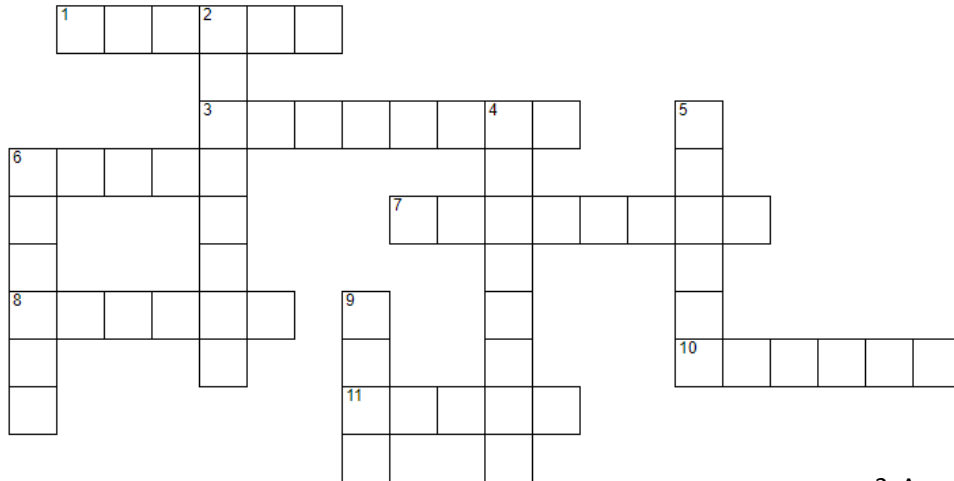
Blue Crab

Word Bank

Beaver	Terrapin
Rockfish	Squirrel
Egret	Blue Crab
Deer	Rabbit
Oyster	Osprey
Otter	Red Fox



Osprey



Across

1. A shellfish that cleans the water.
3. A fish that is officially known as a 'Striped Bass'.
6. An aquatic mammal that swims by moving its tail and long body.
7. A crustacean that has two large claws.
8. A small animal with big ears that is fond of carrots, grasses, lettuce.
10. A red canine that is related to wolves and dogs.
11. A bird, known for its long neck and legs.



Egret

Down

2. A reptile named for the diamond-shaped rings on its shell.
4. A small rodent that tend to bury their food for winter and like nuts.
5. A large rodent that is known for building dams and lodges in ponds, lakes, and waterways.
6. A bird sometimes called a 'fish hawk'.
9. A mammal sometimes called 'Bambi'.



Find Your Chesapeake!

The Chesapeake Bay and its region offers gorgeous views and fun activities for residents and visitors. You can find yourself hiking, fishing, biking, picnicking, paddling, and much more! In addition to all of these activities, you can also visit one of the many National Park sites located in the Chesapeake Bay watershed.

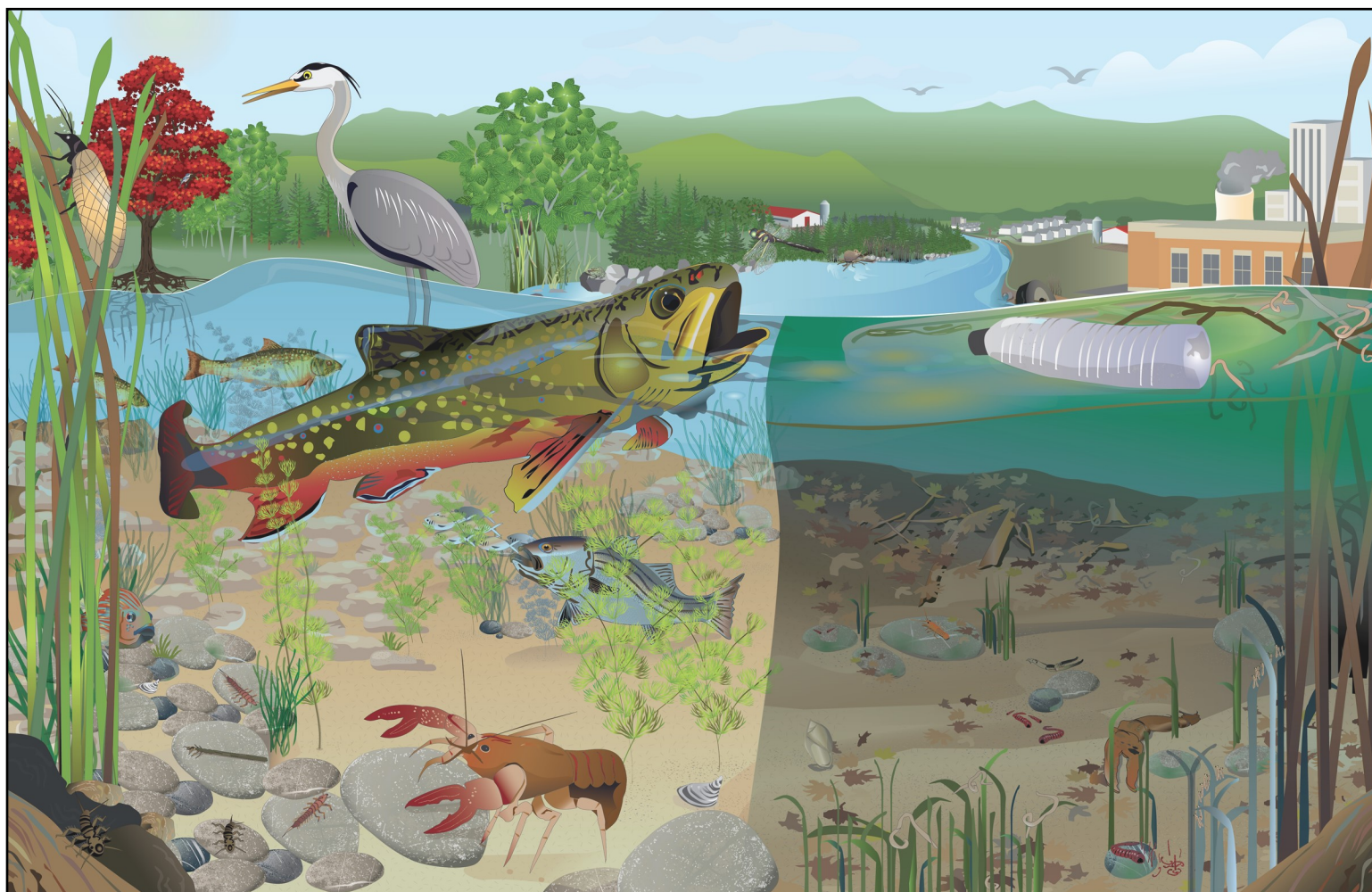
Use the space below to draw an activity that you want to do in the Chesapeake Bay region with friends or family. Plan an adventure using the lines to explain your activity!

Having trouble figuring out an activity for the day? Head to FindYourChesapeake.com to discover all the different things you can do in the Chesapeake Bay watershed!

Spot the Difference

The Chesapeake Bay has become polluted due to the actions of humans. **Pollution** is the introduction of litter and chemicals into an ecosystem, which harms animals, humans, and habitats.

See if you can help clean this waterway by circling all the pollutants on the right side of the image. Then, write down two ways the left side shows a healthy waterway, and two ways the right side shows a polluted waterway.



Healthy

Polluted

Help Save the Bay!

The actions of humans have hurt the health of the Chesapeake Bay. There are many different things that you can do to help clean-up the Bay. No helpful action is too small and everything will make a difference!

Use the checklist below and make a 'X' for any action that you or your family currently do to help the Bay and the environment. You can also circle what you would like to do to help the environment.

Ways to Help the Bay!



- ☐ Recycle.
- ☐ Put trash in trash cans (don't litter).
- ☐ Turn off the lights when not in use.
- ☐ Turn off the water when you brush your teeth.
- ☐ Take shorter showers (8-10 minutes).
- ☐ Use reusable shopping bags and water bottles.
- ☐ Reuse bags.
- ☐ Reuse school supplies.

- ☐ Have a pollinator garden.
- ☐ Compost.
- ☐ Plant native plants and trees.
- ☐ Join a local clean-up for a park, beach, river, or road.
- ☐ Visit a local farmer's market.
- ☐ Attend a local tree planting.
- ☐ Explore the Chesapeake Bay often.





An Arrowhead Adventure

The National Park Service (NPS) was formed in 1916 to take on the role of protecting significant environmental and historical places and educating the public on the importance of these sites.

As you explore the Chesapeake Bay region, you may find sites that have the National Park Service logo, the arrowhead, on their buildings. This logo is one of the easiest ways to tell whether a site is part of or a partner of the National Park system.



The NPS arrowhead is full of symbols. A **symbol** is a mark, sign, or word that represents an idea, object, or relationship. **Draw a line to match a symbol to its meaning! One has been completed as an example.**

Sequoia Tree

Wildlife

Mountain

History

Bison

Vegetation

Water

Scenery

Arrowhead Shape

Recreation





Certificate of Completion

This certifies that

has successfully completed the requirements to become a Chesapeake Bay Junior Ranger.



Junior Ranger Pledge

As a Chesapeake Bay Junior Ranger, I promise to explore the Chesapeake Bay and its watershed and share my discoveries with others.

I will learn about the history and environmental importance of the Chesapeake Bay and its watershed.

I pledge to protect the Chesapeake Bay and all natural, cultural, historical, and recreational spaces for the betterment and enjoyment of current and future generations.

Junior Ranger Signature

Ranger Signature



Send my badge to:

Congratulations on completing the Chesapeake Bay Junior Ranger booklet! To receive your Chesapeake Bay Junior Ranger badge and certificate, either mail or email your packet to us.

Junior Ranger: _____

Age: _____

Address: _____

Mail in your completed booklet to:

NPS Chesapeake Bay
410 Severn Avenue
Suite 314
Annapolis, MD 21403

OR

E-mail a photo of any completed page, your filled-in certificate (previous page), and this contact page to
chesapeake_info@nps.gov.