Healthy or Harmful? RIVER HABITAT AND BIODIVERSITY



Grades: K-5

Suggested category/unit: Life Science: Parents and their Offspring.

PGE cares a lot about the rivers where we generate power. Our biologists help fish get around our dams using fish ladders and other tools. But helping fish travel to and from the ocean is only part of the process. These fish also need a great place to live.

Follow the steps below to learn which qualities make an area healthy habitat for fish and which ones make it harmful.

Part 1: The Four "C"s

Salmon like their rivers to be clean, clear, cool and complex. We call these the Four "C"s of healthy habitat.

\$	Clean = No pollution or litter
60	Clear = You can see right through the water, it isn't cloudy
*	Cool = Cold temperature, shady
	Complex = There are boulders, logs, and the river is wavy (rather than straight)

Read each description below. If it describes something **helpful** for fish, draw a star in the box. If it describes something **harmful** for fish, draw an X in the box.

Large trees near the river provide shade Invasive (non-native) grasses have taken		People fishing along the banks are not following Oregon's rules for fishing	Visitors are looking at and enjoying the fish and other animals from a safe distance	
over, pushing out other plants		Cows from a nearby farm are drinking from the stream, kicking up	The stream curves back and forth in a natural way	
People are leaving trash along the banks			dirt and leaving their waste behind	The water is shallow and feels warm when
Logs in the stream give small fish places to hide from predators, like eagles or otters		There are many different kinds of insects	urswers: Healthy, Harmful, Harmful, Healthy, Healthy, Harmful, Harmful, Healthy, Hallhyy, Harmful, Harmful, Healthy, Harmful, Har	

Part 2: What would you see?

Draw a HARMFUL stream in the box below, using as much detail as possible. Use the following questions to help you add more detail to your picture.

What does the river look like?How does it feel?What kinds of plants or trees do you see?	What do you hear and smell?Are animals using the river? Which animals, and how many?How are human visitors behaving?
Now, draw a HEALTHY stream in the box the same questions from above to help yo	below, using as much detail as possible. Use
	a add more detain
the same questions from above to help yo	
the same questions from above to help yo	
the same questions from above to help yo	

Part 3: (optional) Stream observation field trip

Alongside a parent or guardian, visit a river or stream close to your house. Observe the stream, and answer the questions below.

What are the first things you notice about this river/stream?
Are there logs and rocks in the water?
Does your stream flow in a straight line, or does it curve back and forth?
Are there trees and plants along the banks? Can you name any of them?
Are humans or pets visiting the stream? How are they acting?
What kinds of wild animals do you see? (Look for mammals, birds, insects, reptiles, amphibians, and fish)
Are there both predators (animals that eat other animals) and prey (animals that get eaten)? If you were an animal living in or near this stream, would you be able to find enough food?
Touch the water. How does it feel?
Sit still for 60 seconds. What do you hear?

How do you feel?