

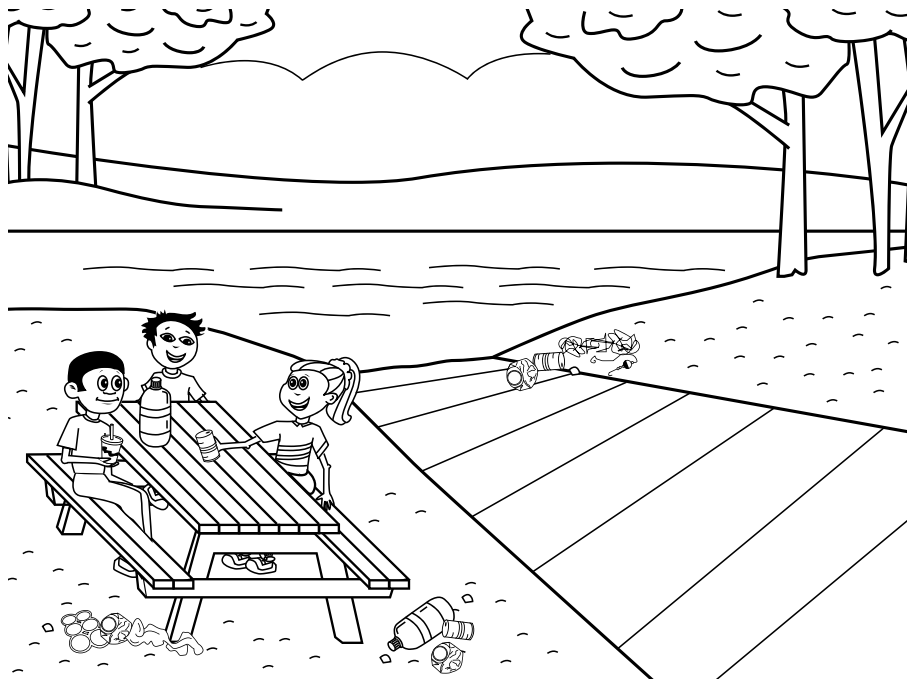


Activity | TRAVELING LITTER

When you visit the beach, would you rather find seashells—or pieces of litter? The answer is obvious.

Litter can be tossed along the road, blown out of a truck, discarded at the beach, or thrown from a boat. Although litter initially may be released far from the coast, it can travel downstream and enter the ocean, where it becomes marine debris. Anyone residing or traveling within the boundaries of a **watershed** is a potential contributor of littered items that increase the problem of marine debris.

Source: Angela Bliss, Adopt-A-Wetland Coordinator, University of Georgia Marine Extension Service, and Margaret Olsen, Education Specialist, COSEE SE



PROCEDURE

1. Students stand shoulder-to-shoulder in a line.
2. Student at the far left of the line is “upstream” at the **headwaters**, student at the far right of the line is the “ocean,” and all students in between represent the river from the **headwaters** to the ocean.
3. Provide one piece of clean litter to each student.
4. Teacher or student reads aloud the story, “It’s All Downstream from Here.”
5. After the first section in the story, the student upstream (**headwaters**) passes the piece of litter to the next student in line. At the next section of the story, that student passes both pieces of litter to the third student, and so on down the line until all litter reaches the last student. The last student will be left holding and juggling all pieces of litter.

PURPOSE

To demonstrate how **watershed** litter migrates to rivers and the sea.

OBJECTIVES

The students will:

- ▶ Predict the movement of litter from river to ocean
- ▶ Identify the importance of personal **stewardship**
- ▶ Articulate how a reduction of litter in communities within a watershed will lead to reduced coastal litter impacts

MATERIALS

- ▶ Story: “It’s All Downstream from Here”
- ▶ Gather a collection of litter from picnic, camping, or recreational activities. Avoid glass or breakable items.
 - Suntan lotion bottle
 - Newspaper
 - Soda bottle
 - Fast food wrapper
 - Drink can
 - Paper plate
 - Paper napkins
 - Candy box
 - Shampoo bottle
 - Foamed drink cup
 - Plastic grocery bags

OBSERVATIONS

1. Ask the student representing the ocean, was it fair for him or her to get all the litter from everyone upstream?
2. Which of these litter items have been recycled or reused?

CONCLUSION

1. What is the nearest river to you, and what is the nearest beach that would get the litter from your community?
2. Describe how you would reduce litter at each part of the story?



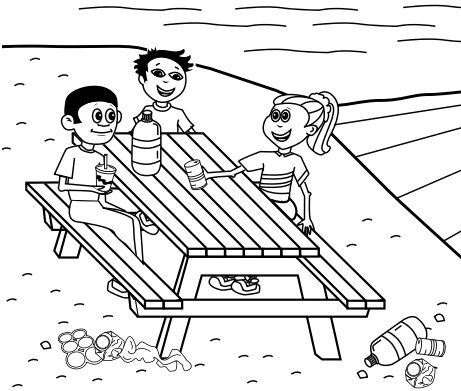
Activity | TRAVELING LITTER (continued)

“It’s All Downstream From Here”

NOTE TO TEACHER: Change the name of the place—mountain, river and barrier island to make the story relevant to your location.

Our class took a field trip to the foothills of the Appalachian Mountains in South Carolina. We visited a small town built next to a beautiful, fast-running trout stream. At the town’s park, we stopped for a picnic. To our dismay, we noticed local folks at the park tossing their picnic waste on the ground. (Action: pass a piece of litter) The wind blew paper plates and napkins into the little trout stream. (Action: Pass another piece of litter). We boldly asked, “Why are you littering?” They replied, “It’s OK, it’s all downstream from here.” The light paper objects floated quickly away and the stream ran clean again. Where did their litter go?

We were curious and decided to follow the stream. We packed our bags and took off down the mountain in search of the litter. As it grew dark, we set up camp alongside a larger stream close to another town. We discovered that this larger stream was actually connected to the little trout stream that we had seen earlier. As we fixed dinner on the camp stove, we noticed people fishing on the stream bank tossing their drink cans into the water. (Action: Pass a piece of litter.) We asked them to stop. They just replied,



“Don’t worry; it’s all downstream from here!”

(Action: Pass a piece of litter.) In an instant, the cans floated out of sight. Where was this litter going?

The next morning, we continued our travels along the stream. The stream emptied into a large river, full of rapids and rocks. As evening came, we camped at a park near a boat landing. What a magnificent sight to watch the sun set over such a beautiful river! After a good night’s rest, we woke up to make a hot breakfast on the camp stove. We noticed a boat owner adding oil to his outboard motor and tossing the can into the river. “Stop!” we yelled. (Action: Pass a piece of litter.) His reply was the same: “What’s wrong? It’s all downstream from here!” In a few moments, the current took the oil can but left the tell-tale rainbow sheen of oil on the surface of the water. (Action: Pass a piece of litter.)

We continued the field trip and drove through an urban neighborhood. Garbage cans were overflowing with litter. We saw a local resident toss more litter on the pile. (Action: Pass a piece of litter.) Didn’t he know that a rainstorm would wash this litter into the gutters and then it would flow into the river? When we asked him why he didn’t pick it up, he replied, “Why should I bother? It is all downstream from here.” (Action: Pass a piece of litter.)

As we drove on the highway alongside the river, we passed a pick-up truck carrying trash to the landfill. Loose paper and plastic grocery bags were blowing out of the back of the truck. (Action: Pass a piece of litter.) We blew the horn at the driver and asked, “Why not cover the trash?” His answer, “That’s not my job, and besides—it’s all downstream from here!” (Action: Pass a piece of litter.)

Further on, we saw our wide, slow river spread into the harbor. We stopped for gasoline and water at a convenience store. Rain was pouring down. We could see the trash from the store wash into a storm drain (Action: Pass a piece of litter.)

Our field trip ended at a beach town on a thin barrier island. (Action: Pass all remaining litter to the last student in line.) It seemed like a clean town, but the residents looked mad. As we walked out onto the beach, we understood. They were picking up paper plates, napkins, and drink cans that had washed onto their beach. They said they had to do this every week to keep their beach beautiful.

We asked, “Did you throw this litter on the beach?” One person replied, “No, the litter washed down from the river.” The beach community depended on tourism and clean beaches. In addition to litter on the beach, they have found gulls entangled in plastic line and sea turtles killed by eating plastic bags.

Our class agreed that folks upstream don’t understand the connection to the ocean. Streams are part of their **watersheds**. Upstream litter ends up downstream.