## The Story of Freddie the Fish

**Overview:** You will demonstrate the effects of pollution on fish by reading the story of Freddie the Fish as he travels downstream. To make it interactive, use student volunteers to play the part of Freddie and to pour "pollution" into the water.

Time: About 10-15 minutes

## **Ages:** Kindergarten – Sixth Grade

Grades 2 or older can read the part of Freddie. For older students, add more complex sources of run-off and modify Freddie's comments. There are alternate versions of the Freddie the Fish story on the web to give you more ideas.

## Materials:

Fish bowl or small aquarium

A few rocks and a small twig for the fish bowl

Water

Stick or rod that reaches across the top of the fish bowl

A fishing lure that looks like a small fish or small plastic fish

String

Small cups to hold:

- Dirt
- Raisins
- Green liquid use green food coloring, lime powdered drink mix or powder gelatin mixed in water
- Pancake Syrup or Soy Sauce
- Sand or bits of limestone
- Parts of a Styrofoam cup, paper, a broken plastic spoon, etc

Script for "Freddie Says" cut apart

## **Directions**

Use a fish bowl or small aquarium with clean water, a few rocks on the bottom and a stick in the water to represent some vegetation. Using a rod or ruler and string, suspend the lure about mid-way down in the water. This is Freddie.

Ask for volunteers. You need some who like to read out loud and some who like to be messy. For large groups, use 10 volunteers, two for each stop along the way, with one student playing Freddie and the other pours in the pollution on your signal. Be sure to line the children up in order with their scripts and cups of pollution. Encourage the rest of the children to react as Freddie would react during the story.

Tell the children that they are about to go on an imaginary journey with Freddie the Fish. (Introduce Freddie). Let them know that the volunteers will be talking for Freddie.

"Imagine that we're at the beginning of <name your local river or stream>. There are trees all along the banks (sides of the river/stream). The water is cool and clean. This is where Freddie the Fish lives. Freddie has lived in this stretch of the river all his life. But now he is going on a big adventure! He's going to travel downstream!"

	Narrator	Freddie Says (child volunteer)
1	Here he goes! (Wiggle Freddie.)	It's getting sunny and hot.
	As Freddie swims downstream, he comes to a place where people will be building new, big houses. Big bulldozers knocked down trees to make way for building.	What happened?
		All the trees are cut down!
	<read freddie="" says=""></read>	
	It begins to rain. There are no tree roots to hold the soil in along the river bank and dirt slides down into the water.	
	(Dump soil in into Freddie's jar.)	
	Oh, no, Freddie! How is Freddie? ("Yuck!")	
2	Freddie swims on down the river. See if you can guess where he is now.	Look! There are some big, brown animals with horns coming down to visit me! One of them said, "Moo!" Oh, look – he's leaving me
	<read freddie="" says=""> (Pour raisins into the water.)</read>	
	Where is Freddie? (pasture, ranch or farm)	some presents!!
	Are these good presents for Freddie?	
3	Freddie swims farther on down the river. He comes to a new place.	I see a bunch of people hitting a little ball with a
	<read freddie="" says=""> (Pour in green liquid)</read>	stick! Look at that green, green, GREEN grass! Hey, here's a little stream running off of that grass. Oh, no – it's sticky, green stuff!
	Oh, no, Freddie!	
	Where is Freddie? ( <i>next to a golf course</i> ) Some golf courses put lots of fertilizer on the grass to keep it green. Extra fertilizer runs off into the river, especially when it rains. This hurts our rivers and streams.	
	How is Freddie?	

4	Freddie swims beside a house. Someone is changing the oil in his car. Wait – is he pouring the oil down the storm drain along the street?? <read freddie="" says=""> (Pour pancake syrup into Freddie's jar.) How is Freddie?</read>	Oh, no! Oil is coming out of that pipe! The oil is heading right for me! My gills are getting covered in oil !!!
	That man doesn't know that storm drains go straight into the river! Anything we pour into the street goes straight into our streams and rivers!	
5	<ul> <li>Poor, Freddie! Off he swims.</li> <li><read freddie="" says=""></read></li> <li>(Pour sand or rock dust into the water)</li> <li>Oh, my! All that sand and rock dust is blowing into the water. What do you think of the water Freddie is in now? How is Freddie?</li> </ul>	Wow, there are big trucks digging in the dirt over there. What's all that stuff blowing into the water?
6	<ul> <li>Freddie swims past the city park. Some picnickers didn't throw their trash into the garbage can. The wind is blowing it into the river.</li> <li><read freddie="" says=""></read></li> <li>(Sprinkle parts of a Styrofoam cup, paper, a broken plastic spoon, etc. into the water.)</li> <li>How is Freddie?</li> </ul>	Ahh, look. People are having a picnic. Oh, no! What's all this junk in the water?? I can – hardly – get – through – all – this – litter! Yuck!

What do you think about the water Freddie is in now?

How did it get so dirty?

Does this happen in real life?

How can we keep the water clean for Freddie and other fish that live in our rivers and streams?

- 1. It's getting sunny and hot. What happened? All the trees are cut down!
- 2. Look! There are some big, brown animals with horns coming down to visit me! One of them said, "Moo!" Oh, look he's leaving me some presents!!
- 3. I see a bunch of people hitting a little ball with a stick! Look at that green, green, GREEN grass! Hey, here's a little stream running off of that grass. Oh, no – it's sticky, green stuff!
- 4. Oh, no! Oil is coming out of that pipe! The oil is heading right for me! My gills are getting covered in oil !!!
- 5. Wow, there are big trucks digging in the dirt over there. What's all that stuff blowing into the water?
- 6. Ahh, look! People are having a picnic. Oh, no! What's all this junk in the water?? I can – hardly – get – through – all – this – litter! Yuck!