

FACTivity

Teachers may use the lesson plan at the back of this journal to guide student reading of the article.

Time Needed: Two class periods.

Materials Needed:

- “Toad-ally Awesome” article
- “Swimming Upstream Without a Ladder” article (You may download and print this article or order it from the *Natural Inquirer* Web site <http://www.naturalinquirer.org/Dams-and-Pipes-and-River-Shrimp-Movementsa-11.html>)
- Paper
- Pencils

You learned in this article that flooding can provide a service to the toads living along the Rio Grande in New Mexico. When flooding occurs in the spring, wet areas are created that provide places for toads to reproduce. In this FACTivity, you will answer these two questions:

- 1. What are the similarities of and differences between flooding in the bosque and the flow of mountain streams in Puerto Rico?**
- 2. How do the ecosystem services provided by these two waterways compare?**

The method you will use to answer these questions is:

Following the reading of the article: Make sure that everyone in your class has read and understands the “Toad-ally Awesome” article. In a rapid-fire exercise with the entire class, make a list of as many ecosystem services (or benefits) provided by the bosque as you can. Try to use your imagination to come up with benefits that may not have been discussed in the article. Put this list on the wall where it can be used during the next class period.

Next class period: Following the same procedure used to read “Toad-ally Awesome,” read “Swimming Upstream Without a Ladder.” Organize into groups of 3 to 4 students. Each group of students will compare and contrast the two articles.

Use the list of benefits identified earlier. Record similarities and differences using the chart on the next page.

Each group should share their findings with the class. Hold a discussion about the ecosystem services or benefits provided by waterways. Brainstorm other ecosystem services provided by waterways. Students should put their names on their charts and turn them in to the teacher. The teacher can use these charts as an assessment tool.

Extension: Research waterways in your area and identify how those waterways benefit the plants and animals that live near them.

	Describe (One sentence for each waterway)	Similarities	Differences
The Waterway			
The Land			
The Animal Being Studied			
The Climate			
The Dams			
Benefits Provided by the Waterway			



If you are a Project Learning Tree-trained educator, you may use PLT Activity #94, "By the Rivers of Babylon," PLT Activity #9, "Planet Diversity," and PLT Activity #29, "Rain Reasons" as additional resources.

Additional Web Resources:

USGS's Woodhouse's Toad Page

<http://www.npwrc.usgs.gov/resource/herps/amphibid/species/bwood.htm>

National Park Service's Rio Grande Web Page

<http://www.nps.gov/rigr/>

