



# *Love Your River*

## Science Challenge

Sponsored by Green Saves Green

Rivers provide beauty, entertainment, and many benefits to a community. Students in Grades 6-8 are invited to participate in a science challenge to show why waterways and water quality are important and what can be done to help protect them.

Presentation:           Storyboard

Judging Criteria:      Understanding of concept, Display of knowledge, Completeness of task, and Presentation

**Prizes will be awarded for each grade level!**

**Possible Challenges (choose one below or come up with your own idea):**

**Water Works:** Take at least two water samples, one from a local river, one from a creek. Label samples and assess water quality for pH, temperature, dissolved oxygen, bacteria, nitrates, and other nutrients. How do the samples define water quality in the river and in the creek? Are there significant differences between the river and the creek? If so, why?

**Water Cycle:** Create a graphic showing the water cycle. Examine how water, in its various states, becomes polluted as it travels through the cycle.

How do pollutants affect our water supply? What can an average person do to improve water quality?

**Field Study:** Visit a local river or creek. Make notes of what vegetation, animals and pollutants you see in and around the water. Take photos or draw pictures of the area. Explain why the type of vegetation around a creek is important. What happens when the natural shoreline is removed and replaced with grass or farm fields?

**Impacts of Agriculture:** Develop a plan or project that addresses agricultural impacts on the nearby rivers and streams.

**Impacts of Development:** Develop a plan or project that addresses the impacts of residential and commercial development on the nearby rivers and streams.

Students must present their challenges on storyboards. Students can use text, diagrams, graphs, charts, drawings or photographs to showcase their work. Students must include their name, grade and school name with submissions.

Challenges will be submitted to the students' science teachers. Teachers/schools will select and submit the top three projects in each grade level.

The top selections from all participating middle schools will be on display at the *Love Your River* event at the Museum of the Albemarle in Elizabeth City, April 18, 2020. Judges will select the first, second, and third-place winners for each grade.

Call Marlene Greer, 252-330-2122, to have submissions picked up.

**Deadline to submit: March 31, 2020**