YOU WRITE IT

We did the interview. We wrote the headline. *You* write the article.

Directions

1. Read the interview.
2. Choose a central idea for your article.
3. Write a three-paragraph article based on the interview. Be sure to include quotes.

Friends Satvik and Laya with the HydroAlert device they invented

WHAT TO KNOW

What Is a Flash Flood?

Flash floods are the most dangerous type of flood. They occur when great quantities of rain fall during a short period of time. Flash floods turn calm rivers and streams into raging torrents. According to the National Oceanic and Atmospheric Administration, flash floods cause more deaths in the U.S. each year than tornadoes, hurricanes, or lightning. Nearly half of all flash flood fatalities happen in vehicles.

Teens' Invention Keeps Drivers Safe

How three Texas teens are protecting drivers from dangerous floods

Scope: What inspired you to make HydroAlert?

Laya Yalamanchili: In 2016, a truck was swept away at a low-water crossing in our neighborhood in Austin, Texas, and the driver drowned. We felt a great amount of grief. We wanted to develop a system to prevent these tragedies.

Scope: What is a low-water crossing?

Kaavya Yalamanchili: A low-water crossing is a road above a water source, such as a stream or river. A low-water crossing provides a bridge for cars to drive over. When water levels are high, like during a flood, water runs over the bridge.

Scope: Why are they dangerous?

Satvik Dasari: It takes only about 18 inches of water to lift a car and sweep it away. It can be hard to judge the height of the water on the road, especially at night. So most people underestimate the power of the water and cross the bridge rather than turn around.

Scope: How did you come up with the idea for HydroAlert?

Laya: We did research and found that most low-water crossings do not have automated systems to measure water levels because those systems are expensive. We decided to develop a low-cost system that could automatically measure water levels and alert drivers about floods.

Scope: How does the system work?

Satvik: The system consists of three main components: a sensor that measures the water level, a device that receives the water level data and determines if the road is safe to cross or not, and an app that sends safety alerts to users.

Scope: What makes HydroAlert more effective than other flood warning systems?

Satvik: The existing systems didn't provide warnings ahead of time. The most common warning system was a stake with painted markings on it so drivers could see how high the water was. The issue was that drivers often didn't know how high the water was until they got too close and it was too late. Another warning system costs upward of $30,000, which means it was installed at only a fraction of the low-water crossings in Texas. Because HydroAlert is affordable, it can be installed at numerous locations.

Kaavya Yalamanchili, Laya's sister, is working on getting HydroAlert installed across Texas—and beyond.

Scope: What's next?

Kaavya: We want to continue to expand into other counties and cities in central Texas. We've also had requests from other countries, such as Bangladesh and India. Our hope is that HydroAlert can be used worldwide.

Scope: What advice would you give to kids who have an idea for an invention?

Laya: Young people have the power to contribute to society in a big way with their unique perspectives. It all starts with identifying an issue or a problem in your community that you care about. From there, by identifying resources, forming a team, and working with others, it is possible to come up with a solution and implement it. If you are passionate about the cause, then you can achieve anything. ●

Writing Contest

Send your article to You Write It Contest. Three winners will each get a $20 gift card to the online Scholastic Store.

Entries must be submitted by a legal resident of the U.S. age 18 or older, who is the teacher, parent, or guardian of the student. See page 2 for details.