

## **Human Impact on Water Quality**

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### **Synopsis**

Human Impact on Water Quality is designed for middle school students that encompass multiple North Carolina science curriculum objectives. The unit is intended to enrich students' knowledge and understanding of the human impact on water quality. Using surface runoff in our school's parking lot, students identify the problem and analyze the impact that runoff has on a local creek. This unit challenges students to recommend solutions to solve this problem by creating models that would show the results of their discoveries. This unit is divided into six phases or modules each one covering a specific curriculum objective. Teachers can use any number or combination of phases and activities. Even though activities are designed for middle school students, they can be modified to fit objectives for other grade levels. The unit begins with the distribution of freshwater and how much is available for human use. It continues by introducing how human impact has affected the environment of the Carolina heelsplitter. Students will conduct a series of tests to determine the water quality of a local creek and the impact surface runoff is having on this creek. It concludes with students presenting their analysis and possible solutions to solve the surface runoff.