

# WATER WE GOING TO DO?



## FLOODPLAINS AND WATERSHED MANAGEMENT (SCIENCE)

Link: <https://bit.ly/2CpaCT7>

### Summary

In this lesson, students will explore how water behaves on various substrates (ground surfaces), what occurs during a flood, and the causes of flash floods. This lesson concluded with students designing and testing various floodplain models intended to mitigate the effects of flash floods. *Acknowledgement: This lesson was written through a partnership with the Oklahoma Floodplain Management Association division of the Oklahoma Water Resource Board.*

### Essential question

**What can scientists do to understand the factors involved in flash floods and how can the effects from flash floods be mitigated?**

### Lesson Snapshot

#### *Engage*

Students will view an EAS (Emergency Alert System) flash flood warning and/or flash flood video clip. Students will utilize a KWL chart to organize what they know about flash floods.

#### *Explore*

Students will use clay models and graph paper to investigate watersheds and explore how water behaves in a general watershed. Students will also investigate how water behaves on various substrates.

#### *Explain*

Students will participate in collaborative group discussion to summarize the findings from the watershed and substrate experiment.

#### *Extend*

Students will investigate specific watersheds containing different substrates and how these would relate to flash floods.

#### *Evaluate*

Students will design and create a community watershed model to represent an “ideal” community design to mitigate flooding. Students will also create a presentation showcasing their model addressing flash flooding using the theme “Turn Around Don’t Drown.”