

## **Build a Watershed - GRADE FOUR**

[CA Science Framework](#) (p.228-252)

### **GRADE FOUR INSTRUCTIONAL SEGMENT 3: SCULPTING LANDSCAPES**

#### Guiding Questions

- How do water, ice, wind, and vegetation sculpt landscapes?
- What factors affect how quickly landscapes change?
- How are landscape changes recorded by layers of rocks and fossils?
- How can people minimize the effects of changing landscape on property while still protecting the environment?

#### Performance Expectations

Students who demonstrate understanding can do the following:

4-ESS2-2. Analyze and interpret data from maps to describe patterns of Earth's features [Clarification Statement: Maps can include topographic maps of Earth's land and ocean floor, as well as maps of the locations of mountains, continental boundaries, volcanoes, and earthquakes ]

4-ESS3-2. Generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans \* [Clarification Statement: Examples of solutions could include designing a flood resistant town and improving monitoring of rainfall activity] [Assessment Boundary: Assessment is limited to earthquakes, floods, tsunamis, and volcanic eruptions.]

3-5-ETS1-2. Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem

3-5-ETS1-3. Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved