

## CMaP PROJECT

**Project Title: The Effects of Erosion from Flooding**

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**Class: Richfield CMaP 2011**

Project Description	This project will show how flooding accelerates the effects of erosion. A small-scale model will be made in class showing how water transports materials. Then the students will examine pictures to determine the effects of flooding on the Sevier River.
Community Issue or Problem Selected -How project evolved?	Recent flooding of the Sevier River has eroded farmland, riverbanks, and other natural resources.
Community Partner(s)	Sevier County Commissioner's office, Richfield Reaper newspaper
Project Objectives	Students will see the effects of erosion, specifically water erosion, in our local area following flooding.
Utah Core Standards/Objectives	4 <sup>th</sup> Grade Science Standard 3 Objective 2c Model erosion of Earth materials and collection of these materials as part of the process that leads to soil (e.g., water moving sand in a playground area and depositing this sand in another area.
Essential Question(s) -Spatial Issue	What can be done to prevent erosion due to flooding? Where does the eroded soil go?
Assessments (rubrics, scoring guides)	Create a rubric that shows the student's participation in making their erosion model, willingness to help within their group, and reporting on group project results.
Project Products	Supplies for in-class models (see UEN lesson plan) Pictures from flooding-Richfield Reaper newspaper County maps-Commissioner's office
Project Timeline (include a step by step	3-30 minute class sessions Day 1-Introduction to weathering and erosion.

Procedures)	Day 2-Make class erosion models and study water erosion. Day 3-Examine local photos and determine effects of flooding and erosion.
Resources Needed	Sevier County maps, flooding pictures, UEN lesson on erosion models: <i>Slip, Sliding Away</i> <a href="http://www.uen.org/Lessonplan/preview?LPid=15092">http://www.uen.org/Lessonplan/preview?LPid=15092</a>
Skills Required	Students will need to be familiar with weathering and erosion.
Project Team Member Roles	<u>Teacher(s)</u> : Teacher will present material for Day 1 lesson. Then will act as facilitator for Day 2 and Day 3 lessons. These days should be student directed.  <u>Students</u> : Students will make small in-class models. Study and observe flooding pictures/effects  <u>Partner(s)</u> : Richfield Reaper, County Commissioner
Celebration/Presentation	Groups will present their findings to other class members.
Project Evaluation	Write a letter to the Richfield Reaper editor sharing the findings and results of the project.
Project Bibliography	UEN lesson plan
Plans for Future CMAP Activities	Other types of erosion can be studied such as wind and ice. Students can be given individual maps to learn mapping skills.