**Template for CMaP Project**

**By Laura Reed**

**Grand County High School**

**Name:** Laura Reed  
**Class:** Moab 2007  
**Project Title:** Moab Quality Soil Report

<table>
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<tr>
<th>Project Description</th>
<th>The Moab Quality Soil Report will utilize freshman Earth Science students to collect and analyze soil data in and around the community of Moab, Utah, monitor changes and publish data to web page.</th>
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| Community Issue or Problem Selected - How project evolved? | • To analyze soil quality in and around Moab community  
• To monitor changes in soil quality over time |
| Community Partner(s) | • BLM  
• NPS  
• Grand County |
| Project Objectives | Students will  
• explain the importance of soil  
• explain soil-forming factors  
• describe basic biological, physical, and chemical properties of soil  
• analyze soil fertility  
• publish data to web page  
• create data map using GIS |
| Utah Core Standards/Objectives | **Standard 2:** Students will understand that the features of Earth’s evolving environment affect living systems **Objective 2** Analyze how ecosystems differ from each other due to abiotic and biotic factors. |
| Essential Question(s) - Spatial Issue | • Does soil quality vary in and around Moab?  
• Do soil quality factors effect vegetation type and patterns?  
• Does soil quality change over time? |
| Assessments (rubrics, scoring guides) | Scoring Guides
|--------------------------------------|
|                                      | • Field data collection
|                                      | • Data analysis and Interpretation
|                                      | • Soil Quality Report
|                                      | • Project Board
|                                      | • ArcGIS Map
| Project Products | • Publish Moab Quality Soil Report including ArcGIS 9 map of soil types and distribution, analysis and interpretation of data
|                                      | • Web page (collection and publication of data – yearly)
|                                      | • Science Project Board
| Project Timeline (include a step by step Procedures) | Student projects and web page to be completed November 2007
| Resources Needed | • GIS software
|                                      | • GPS
|                                      | • Soil testing supplies
|                                      | • Transportation
|                                      | • Digital Cameras
| Skills Required | • Use of GPS and GIS software
|                                      | • Web page design
|                                      | • Science data collection and analysis
| Project Team Member Roles | **Teacher(s): Laura Reed**
|                                      | **Students: Freshman Earth Science**
|                                      | **Partner(s): Canyonlands National Park, Grand County, Bureau of Land Management**
| Celebration/Presentation | Presentation of Reports and Project Boards
| Project Evaluation | Student Evaluations
| Project Bibliography | 
| Plans for Future CMaP Activities | Watershed Science, Water Quality, Desert Biodiversity